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REPORT

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ON

Revaluation of Railroads and Canals, New Jersey

1911

BY

CHARLES HANSEL
EXPERT IN CHARGE

TRENTON, N. J.
MacCrellish & Quigley, State Printers, Opposite Post Office.
1912.

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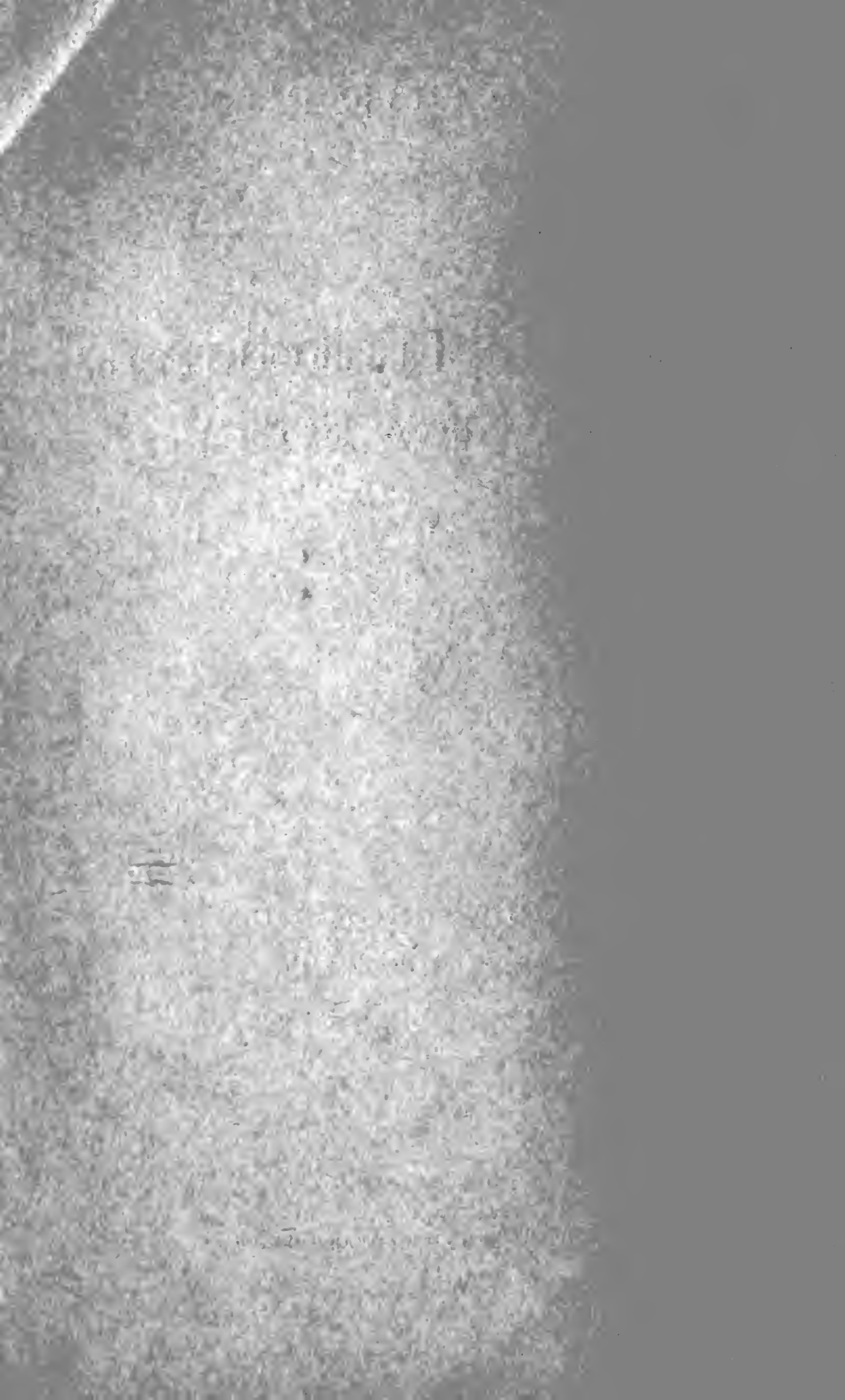

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STATE OF NEW JERSEY,
EXECUTIVE DEPARTMENT, January 22d, 1912.

Honorable John D. Prince,
President of the Senate:

SIR—I herewith transmit to the Senate the report of the Expert in Charge of the revaluation of all railroad and canal property in the State, appointed in pursuance of Chapter 307, Laws of 1910.

Respectfully,
WOODROW WILSON,
Governor.

REPORT.

To His Excellency, Woodrow Wilson, Governor of New Jersey, and to the Honorable State Board of Assessors of New Jersey:

GENTLEMEN—In presenting my report under "Joint Resolution Number 3," approved April 5th, 1909, and "An act concerning an inventory and appraisal of railroad and canal property, including franchise, in the State of New Jersey," approved April 12th, 1910, I desire to thank His Excellency, Governor Woodrow Wilson, the Hon. John Franklin Fort, and the members of the State Board of Assessors for their uniform courtesy, which has been made manifest to me at all times during my work.

Further, I wish to thank the State officials at Trenton, and the members of the County Boards of Taxation for their assistance. No officeholder or member of either political party has sought to secure any position with our working force, either for himself or for another; and, if my work fails to measure up to the expectations of any who have made careful study of the law and its application to the various phases of railroad construction and operation, I can only plead as my defense the magnitude and the difficulty of the multifarious problems presented for determination.

Very respectfully,

CHARLES HANSEL,

Expert in Charge.

ARGUMENT.

The results called for by the legislative enactment under which the work has been conducted are quite different from the results called for in other States which have attempted to determine what is popularly called the "Physical Valuation of Railroads."

VALUATION FOR TAXATION.

Michigan, the first State to attempt the valuation of railroads on any large and comprehensive plan, did so for the purpose of advising the people of that State what the results would be if a change were made from the then existing laws, which used the "Gross Income" of all the railroads in the State as the basis of value. This work was done in 1900-1901.

RULES OF PROCEDURE.

The writer had the honor of being a member of the board appointed by the Governor of Michigan to consider the different questions arising in the work, about which there might be doubt, and to formulate rules of procedure in those cases admitting of a variety of opinions.

"Inventory was made as completely as possible from the railroad records where such were in existence; these were checked up by the field inspector."

It will be observed that the appraisers had the advantage of full access to the records of the railroads and thereby avoided a considerable amount of field work, and its attendant expense, as well as loss of time.

MICHIGAN WORK LESS COMPLICATED.

The railroads of Michigan are less complicated, less costly and of later construction than the railroads of New Jersey, and,

in consequence, the records are probably more complete. The terminals of the Michigan railroads are comparatively unimportant as compared with the terminals of the railroads of New Jersey and there is little floating (marine) equipment.

The cost of the field work in Michigan, exclusive of the work done by the Board of Review, was $75,000.

The work in Michigan contemplated the valuation of the non-physical elements separately from the cost of reproduction; but, since the cost of reproduction may be entirely apart from the true value, we cannot consider methods and rulings adopted by Michigan as a guide in our present work.

WISCONSIN VALUATION FOR TAXATION.

The valuation of the railroads of Wisconsin, following closely on the Michigan work, was carried out on practically the same lines as the Michigan valuation, namely, cost of reproduction. The railroads performed the field work and submitted the results to the engineer of the Commission.

Since cost of reproduction regardless of "true value" was made the basis of the work, we cannot look to Wisconsin for light on the problems which confront us in New Jersey.

MINNESOTA VALUATION FOR RATES.

The valuation in Minnesota, begun in 1906 and completed in 1908, was conducted for the purpose of determining whether the *investment* in the railroad property justified the rates of carriage which the railroad officials declared necessary to give a reasonable return on the investment.

NO APPRAISAL OF FRANCHISE IN MINNESOTA.

No estimate of value was made on the franchise or other intangible elements in Minnesota, the cost of reproduction being the result sought. The report states:

"The artifices resorted to by the railway companies in their efforts to purchase property at normal prices are not enduring,

and once it becomes known, the prices advance sometimes with remarkable increases, and it was found from more than 200 sales of city property to railway companies that a wide range existed between the normal values and the sale price of the individual purchases made."

In Minnesota the valuation was made on two different bases: Estimates A and B. In Estimate A, allowance is made for the price which railways would have to pay for the land for railway purposes, including damages and forced prices for land. In Estimate B, land is valued on the same basis as land lying in contiguous territory. The Minnesota Commission, speaking for the State, contended for the valuation represented by Estimate B. The railways maintained that Estimate A was the fairer one.

It must be remembered that the *purpose* of the valuation in Minnesota was to determine the investment in the property, the results to be used in determining whether the rates established by the Commission would yield a reasonable return on the property or investment of the railroad companies.

The railroads in this case were desirous of showing the highest value, while the Commission were not impelled by the same consideration. The question naturally arises whether the positions of the Commission and the railroads would have been reversed had the valuation been made for the purposes of taxation.

It is apparent that the methods of fixing value under the Minnesota appraisal to determine the amount invested should not be followed by us in New Jersey for the valuation under existing tax laws governing taxation.

The value of the termini lands was determined by adding to the "normal value" different percentages for different cities.

LARGE PERCENTAGE ADDED TO "NORMAL VALUE."

Thus, in St. Paul 75 per cent. was added to the "normal value"; in Minneapolis, 60 per cent. was added, and in Duluth 25 per cent.

The Minnesota report uses "true value" and "normal value" interchangeably, and the "true value" of land was determined by

applying the percentage hereinbefore described to the average value of contiguous and surrounding lands.

Two sets of appraisers made estimates of the "value" of the terminal lands of the Great Northern Company in St. Paul and Minneapolis. The results showed a wide difference of opinion. In St. Paul the difference was 272 per cent., and in Minneapolis 182 per cent.

The engineer of the Railroad and Warehouse Commission of Minnesota says: "The reports were first completed by the railway companies. Then they were taken in hand and by use of special trains every detail shown in these reports was personally examined by myself and staff. The work by the State cost about $70,000, and the expense to the railway companies in preparing the data was probably an equal amount."

In response to the request of the Railroad and Warehouse Commission, the several railroads placed special forces in the field to survey the property and they co-operated in every way with the Commission.

NEW YORK, NEW HAVEN AND HARTFORD RAILROAD.

Mr. John Stevens, when he resigned as Chief Engineer of the Isthmian Canal, was made Vice-President of the New York, New Haven and Hartford Railroad for the purpose of placing a valuation on that property. In response to a letter of inquiry, from this office, Mr. Stevens says:

"The old construction records of the New Haven system are woefully incomplete; therefore, it was necessary to practically measure up every element which entered into the physical construction of the road, which increased our expense to a great extent. Approximately the cost was fifty dollars per mile for the valuation."

We do not presume that the offices of the New York, New Haven and Hartford Railroad are willing to concede that their records are less complete and less accurate than the records of other railroads. They do admit, however, that they were in doubt about the value of their real property, as evidenced by their willingness to expend a considerable sum, probably $115,000 or $120,000, to determine the value of their assets.

Mr. Stevens had the advantage of free access to all records and had the cheerful co-operation of all departments; and he escaped the expense of surveying the complicated New York terminals, and a considerable amount of line, owing to the recent surveys and the accurate construction records developed on account of the electrification of the New York end of the line.

Since the valuation was made by Mr. Stevens his work has been checked by special experts of the State at a cost, according to the Railway-Age Gazette, of some $100,000, or a total of over $215,000, for finally appraising the New York, New Haven and Hartford Railroad.

STATE BOUNDARIES.

The difficulties of the problems involved in determining the "true value" of interstate railroad property, and, separately, the value of the franchise, are augmented by State boundaries and minor civil divisions.

On all interstate, and on some intrastate lines doing business in this State, the movement of rolling or road equipment is partially interstate and it is likely that interstate business is handled by all the equipment at some time or other even though the railroad itself does not reach the boundary of the State.

The division points on the various interstate lines do not fall on or near the State boundary, and, generally, no accounting is carried out to show the intrastate business by tonnage, car miles, train miles, or earnings; and any allocation of such elements are roughly approximated.

NO INTRASTATE STATISTICS.

In many States the railroads are required to return intrastate statistics to the State authorities, but in New Jersey no such accounts are available. We, therefore, face a condition where a logical absurdity may at times be considered a practical necessity.

CHAPTER I.

STATE TAX LAW.

ORIGINAL ACT OF 1884 COMPARED WITH AMENDED ACT OF 1888.

THE LAW.

The original statute, entitled "An Act for the Taxation of Railroad and Canal Property," approved April 10th, 1884, describes the manner of grouping the values under four subdivisions, as follows:

MAIN STEM.

I. The length and value of the main stem of each railroad, and of the water-ways of each canal, and the length of such main stem and water-way in each taxing district.

OTHER REAL ESTATE.

II. The value of the other real estate used for railroad or canal purposes in each taxing district in this State, including the roadbed (other than main stem), water-ways, reservoirs, tracks, buildings, water-tanks, water-works, riparian rights, docks, wharves and piers, and all other real estate, except lands not used for railroad or canal purposes.

PERSONAL PROPERTY.

III. The value of all the tangible personal property of each railroad and of each canal company.

IV. The value of the franchise.

In 1888, the original statute was revised under the title, "An Act to Revise and Amend," "An Act for the Taxation of Railroad and Canal Property," approved April 10th, 1884, approved March 27th, 1888. A close comparison of the original act of 1884 with the amended act of 1888 does not reveal any important changes excepting in Subdivision IV., which was changed from

"THE VALUE OF THE FRANCHISE," as written in the Act of 1884, to read, in the Revised Act of 1888, "THE VALUE OF THE REMAINING PROPERTY, INCLUDING THE FRANCHISE."

REMAINING PROPERTY.

It seems reasonable to suppose that the naked term "franchise," as used in the act of 1884, did not prove comprehensive enough to include the value of all the property or assets not included in Subdivisions I., II. and III., covering real estate and tangible personal property; for, in the act of 1888, we find the franchise included in Subdivision IV., with "the value of the remaining property." This change in Subdivision IV. brings prominently forward intangible elements of railroad properties and practically divides all elements into tangible and intangible or physical and non-physical; and, by thus associating the franchise with "the value of the remaining property," the necessity of exactly determining the definition and value of the franchise standing apart from other elements becomes less important in proportion to the added importance of "the remaining property"; which, by the process of elimination, is automatically classified as intangible personal property assessable to main stem for the benefit of the State.

SUBDIVISION IV., ACT OF 1888.

The act of 1888 sets forth, in terms if not in precise language, that all elements of value not measured by the value of real estate or of tangible personal property must be summed up under Subdivision IV. In other words, after declaring that all real estate and all tangible personal property shall be inventoried, classified and valued under Subdivisions I., II. and III., it provides Subdivision IV. as a catch-all or drag-net for discovering and including all values, of every kind whatsoever, not included in the items "real estate" and "tangible personal property."

JOINT RESOLUTION NO. 3.

The language of Joint Resolution No. 3, approved April 5th, 1909, calls specifically for a "revaluation of all railroad and canal property in the State, real and personal, including separately the franchise, and making a true and complete inventory and appraisal of the true value thereof."

Joint Resolution No. 3 is conflicting in that it calls for a separate valuation of the franchise, and further says the valuation "shall be in form available for use for the purpose of taxation under existing laws." The present tax law of the State includes the value of the franchise with other elements as expressed in Subdivision IV., "The value of the remaining property, including the franchise." We are advised by the drawer of Joint Resolution 3 that he had in mind the law of 1884 which calls for the appraisal of the franchise separately, and since we are required to conduct the work under existing laws we assume it is our duty to include the value of the franchise as set forth in Subdivision IV. of the amended act of 1888.

Since the real estate and personal property are to be inventoried and appraised separately from the franchise, it seems manifest that it is our duty to consider all of the thousands of parts and items of the property owned by each of the several railroads entirely apart from their value as considered in a composite whole, cemented together by the charter or franchise.

The tangible personal property and the real estate of any corporation can be measured, inventoried and appraised. The franchise can be appraised only. It cannot be definitely measured or inventoried. The true value of the separated parts of a railroad property cannot, in the majority of cases, be established by the going price or by the bargain and sale value, as the majority of items are created and constructed for use at a particular place for a particular purpose.

It will be observed that the value of the franchise, in the amended act of 1888, is not classified in the fourth group as an element standing distinctly alone and requiring specific description.

CHAPTER II.

"VALUE OF THE REMAINING PROPERTY, INCLUDING THE FRANCHISE."

SUBDIVISION IV., SECTION 3.

We have called attention to the change from the phraseology of Subdivision IV., Section 3, in the Laws of 1884, to the phraseology of Subdivision IV., Section 3, in the Laws of 1888, and have hereinbefore endeavored to direct attention to the great importance in the difference of the requirements set forth in this fourth division of the respective enactments.

Notwithstanding this marked difference in the elements of value called for in Subdivision IV., of the act of 1884, as compared with the same division of the amended act of 1888, it has continued to be the practice to refer to the franchise as an element to be appraised apart from any other factor of value.

Acting under the original law, of 1884, the State Board of Assessors formulated a method of determining the franchise value and the formula as cited by Chief Justice Beasley, 20 Vroom 1, 1886, reads as follows:

> "That the amount of the capital stock and of the funded debt and other debts of the corporation or person taxable under the act aforesaid should be ascertained, and that the value thereof also be ascertained, and that in all cases where the aggregate amount of the value of the capital stock and of the securities representing said debts was less than the entire amount of the tangible property of such corporation, the value of the franchise should be ascertained by deducting from the aggregate amount of the value of such capital stock and of the securities representing such debts, the aggregate amount of the value of said tangible property, and sixty per centum of the amount remaining in each case should be taken and held to be the value of the franchise of such corporation; and that

> in all cases where the amount of the value of the capital stock and of the securities representing said debts was less than the value of the entire amount of the tangible property of such corporation, the gross earnings of such corporation should be ascertained and that twenty per centum of such gross earnings (being an amount which would make the tax upon the franchise of such corporation a sum equal to one-tenth of one per centum upon such gross earnings) should be taken and held to be the value of such corporation."

The opinion says, further: "It is quite impossible for the court to say that the result thus reached is in anywise erroneous or excessive."

NO CHANGE IN METHOD OF DETERMINING VALUE SUBDIVISION IV.

While the court does not take upon itself the burden of establishing what, in its opinion, should be the proper method of valuing the franchise, it does not disagree with the method adopted by the board previous to the amended act of 1888 and seems to put the burden of proof upon the railroad companies. It will be observed that no mention is made in this formula of any other element of value except the franchise; and we have no opinion of the court before us on this formula as applied to the amended act of 1888, which required the board to find "the value of the remaining property, including the franchise." This seems to us a widely different proposition from that of merely determining the value of the franchise; and, indeed, the act of 1888 seems to broaden the subject so as to remove all questions as to the value of the franchise standing nakedly alone. We are not prepared to state whether or not the formula for determining "the value of the remaining property, including the franchise" as practiced by the State Board of Assessors is the same as that for determining the value of the franchise only as called for in the original act of 1884; but we are of the opinion that the formula adopted before the amended act of 1888 has been used ever since the act of 1884 went into effect.

It is possible that the court would have taken a different view of the formula had it been called upon to adjudicate the question in relation to the amended act of 1888, for it is not unreasonable to suppose that the elements of value as set forth in Subdivision IV. of the act of 1888 required a determination of values largely different from the element of franchise. If this were not so, there would have been no necessity for the amended act of 1888.

Since the appraised value of the franchise has been disclosed in the last report of the State Board of Assessors, some of the railroad companies have appealed to the board for a considerable reduction in the assessed valuation of the respective franchises, and the burden of the argument is that the value of the franchise is merely the cost of securing the charter—a mere legal fee. Many of the learned counsel of the railroad companies are quite ready to recognize the *cost* to produce a legal document as the true measure of the value of the franchise, while they deny the propriety of considering the *cost* to be in any degree the proper basis to use in arriving at the true value of the physical elements.

We do not consider that Subdivision IV. suggests the necessity of placing the value of the franchise as an element *separate* and *distinct* from the value of the remaining property. We deem it advisable and proper, however, to discuss the meaning and value of the franchise at considerable length, for the reason that a great deal of emphasis has been laid upon the value of this element of Subdivision IV. of the amended act of 1888.

CHAPTER III.

FRANCHISE.

DISTINCTION BETWEEN FRANCHISES.

The distinction between the franchise to be a corporation and other rights, privileges and franchises of a corporation has been a subject of much discussion and many adjudications.

The word "franchise" has various meanings, and it is difficult to define the term as used under constitutions and statutes since, as a rule, it is a question of construction in each particular case, precluding any definition applicable to all cases. But it is declared that, where the term "franchise" is used in a statute or elsewhere in the law, it is generally, if not always, understood as a special privilege conferred by grant from the State or Sovereign Power as being something not belonging to the citizen of common right.

A CORPORATION IS ITSELF A FRANCHISE.

It has been declared that a corporation is not only itself a franchise, but that it consists and is made up of its rights and franchises, and that it may hold other franchises as rights and franchises of the corporation.

We understand that, although the business of a common carrier is not of itself a franchise—but is general and has its foundation in the common law, needing in itself no legislative authority —still, a grant to a corporation of a right to lay out, construct and operate a railroad is a franchise.

The right of a railway company to use certain streets acquired by contract with the city giving an exclusive right constitutes no part of the franchise of the company and is not of itself a franchise, although it is in the nature of a property and is an incorporeal right.

RIGHT TO EXIST AND TO CONDEMN.

We believe that a railroad corporation under the constitution and laws of the State, possessing not only the franchise privilege to exist as a corporation, but the right to condemn private property for corporate use, is also one of the most important franchises, since the right of eminent domain is a franchise. In a Pennsylvania case, it is said that the ordinary franchise of a railroad company is, by virtue of the sovereign power of eminent domain, to condemn, take and use lands for the purpose of a public highway, and to collect toll from those who use it as such. So it is declared in a Texas decision, that the ordinary franchises of a railroad corporation are the right to exist and to transact business as a corporation, and the right to condemn property for its use. It is also said that exclusive grants for ferries, bridges and turnpikes are grants of franchises of a public character, appertaining to the government, and that their use usually requires the exercise of the right of eminent domain.

BURKE ON FRANCHISES.

Mr. Burke, in a speech upon a bill to repeal the charter of the East India Company, said:

> "The true nature of the franchise of a private corporation is here portrayed in clear and comprehensive language. We are here told that it is an institution to establish monoply and to create power; that, to speak of such charters and their effects in terms of the greatest possible moderation, they do not at least suspend the natural rights of mankind at large; and, in their very frame and constitution, are liable to fall into a direct violation of them; that all special privileges of this kind, claimed or exercised in exclusion of the greater part of the community, being wholly artificial, and for so much a derogation from the natural equality of mankind at large, ought to be, some way or other, exercised ultimately for their benefit; and that they are not original, self-derived rights

or grants for the mere and sole private benefit of the holders; but are rights and privileges which, in the strictest sense, are derivative trusts and, from their very nature, accountable to the power which created them."

FRANCHISE AN INTANGIBLE RIGHT.

A franchise has been declared to be a "mere legal right or privilege; only an intangible right or privilege not subject to assessment; not property of any description except in the sense that it is valuable; not property within the meaning of that term as used in the bill of rights, even though in one sense property, and valuable property; not real estate; and a ferry is not land nor an incorporeal hereditament." It has also been declared by an eminent writer whose statements, generally, have been accepted as having almost the force of a judicial opinion, that franchises have, with some impropriety, been classed among hereditaments. Again, in a New Jersey case, the court says: "Although, technically speaking, franchises are property, they are property of a peculiar character, arising only from legislative grant, and are not in ordinary cases subject to execution or to sale and transfer, even in payment of the debts of the corporation, without the assent or authority of the Legislature." And it is also held that an action at law cannot be maintained to recover possession of a franchise of a corporation because it is intangible and is incapable of physical identification or delivery.

FRANCHISE PERSONAL PROPERTY.

In some States the franchises and privileges of a corporation are declared to be personal property, and it is stated in a federal case that, according to the law of most States, this franchise or privilege of being a corporation is deemed personal property, and is subject to separate taxation.

We understand that the franchise to be is distinct from the franchise as a corporation to maintain and operate a railway. The latter may be mortgaged without the former, and may pass to a purchaser at a foreclosure sale.

FRANCHISE TO ACT AS ONE PERSON.

Mr. Justice Simonton, in the case of *Central Trust Company of New York* vs. *Western North Carolina Railroad Company*, says:

> "The Western North Carolina Railroad Company was created a corporation by the Legislature of that State in the exercise of a sovereign power. This sovereign power made of several persons a single entity, and conferred on them the franchise of acting as one person. This new person, creature of the law, and existing through the grace and at the will of the sovereign, was then clothed with certain powers and granted certain privileges. These are its franchises: First, the franchise of existence as a corporation—its life and being. This is inseparable from it. When it parts with it—with this franchise—it parts with its life. But, with respect to the other franchises with which it has been clothed—the right and privilege to act as a common carrier, to carry passengers and goods, to charge tolls, to operate a railroad—these it enjoys as an individual could, and they are not inseparable from its existence. They are its property. A franchise to be a corporation is distinct from a franchise as a corporation to maintain and operate a railroad."

FRANCHISE TO BE IS ONLY ONE OF THE FRANCHISES.

It seems manifest that the franchise to be, to exist, is only one of the franchises of a corporation. The franchise to do, to carry on the business of a corporation, is an independent franchise; or, rather, a combination of franchises, embracing all things a corporation is given power to do; and this power, this authority, constitutes a thing of value and a part of the corporation's intangible property as much as do the franchises to be. Franchises to do go wherever the work is done. The courts have held that the corporation may go into various States for the transaction of its business; and wherever it goes as a corporation it

carries with it the franchise to be; because, although, for purpose of jurisdiction in the Federal courts, it is true that a corporation is presumed to be a citizen of the State which created it, it does not follow that its franchise to be is, for all purposes, to be regarded as confined to that State. Again, it would seem that these intangible properties, these franchises to do, exercised in connection with the tangible property which it holds, *create a substantive matter of taxation to be assessed by every State* in which that tangible property may be found.

DUTY TO THE PUBLIC.

It is held that, where a charter authorizes the formation of corporations upon conditions, neither the franchise to be a corporation nor the particular franchise conferred takes effect or vests in the grantee before the actual formation of the corporation; and "a corporate franchise may not be a privilege derived by the act of incorporation, but one which can only be acquired by subsequent grant, and so may never vest." It would seem, therefore, that, to the extent set forth within this summary, a distinction may reasonably be declared to exist between a charter and a franchise.

Railroad corporations are vested with special privileges, and the consideration for the public grant is the performance of their duties to the public. The franchise granted to them is intended to be exercised for the public good. Their business is a matter of public concern, as the public has an interest therein; and such corporations exercise their franchises as quasi public trusts for the benefit of the people.

Technically, railroad companies are private corporations; they are private as distinguished from those created for municipal and governmental purposes. They are also private in the nature of their business in the sense that, even though their uses are public, the contract embodied by implication in their charters is within the constitutional provision which prohibits the impairment of obligations of contracts. Although a railway company is technically a private corporation, yet *it is designed to promote the general public good as well as to advance private speculation.*

FRANCHISE THE LIFE OF A CORPORATION.

"A franchise of a corporation is its life—its being." Although a franchise must have its source in, or emanate from the sovereign power, and that power alone can grant it and make possible its exercise, still, when it, or the charter which evidences it, is once lawfully granted, either under a general act or a special act, and is accepted, it becomes surrounded by constitutional guarantees of protection which no legislative body can set aside or ignore, either by declaring a forfeiture or by otherwise unconstitutionally destroying the franchises, privileges or charter rights of a lawfully-existing corporation.

FRANCHISE HAS NO DISTINCTIVE MEANING.

"In the last analysis the only essential attribute of a corporation is the capacity to exist and act within the powers granted, as a legal entity, apart from the individual or individuals who constitute its members." The Interstate Commerce Commission says: "No provision is made for 'franchise' taxes, because this word has *no distinctive* meaning as employed in State enactments."

FRANCHISE APPRAISED.

For the purpose of carrying out the law as expressed in Subdivision IV., as understood, we have appraised and included, under Subdivision IV., all elements of value not represented in the actual capital invested for the construction of the property, including all betterments and all tangible personal property. The amount thus determined under Subdivision IV., therefore, includes "the value of the remaining property, including the franchise," thereby merging the term "franchise" into the broader term "the value of the remaining property."

GARRISON ON FRANCHISE.

Mr. Justice Garrison, in his opinion in the case of the *Long Dock Company et al.* vs. *The State Board of Assessors,* clearly

sets forth the meaning of the language used in Subdivision IV. of the act of 1888, and says:

> "The revision of 1888, while not varying this requirement, altered the language of Subdivision IV. in a respect that must challenge attention, occurring as it does in a revision that was so extremely chary of making changes.
>
> "The remainder obtained by the deduction of the value of the tangible property from the total value of all the corporate property gives the commercial value of the franchise expressed in the terms of money in strict compliance with the carefully revised phraseology of Subdivision IV., viz., as 'the remaining property,' and thus, also, an intangible value is translated into the terms of the commercial standard; just as in the physical sciences the specific gravity of a ponderable substance is translated into the terms of the common physical standard."

ELEMENTS OF SUBDIVISION IV.

Considering the elements involved in Subdivision IV., in the act of 1888, as being capable of reduction to a commercial value, it becomes necessary to construct a method or formula which will satisfy a reasonable interpretation of the value of the intangible quantities of railroad property. Since the property under consideration is intangible, we cannot inventory it nor apply any generally accepted method of determining its dimensions or unit value; and it is probable that any formula offered will, in many cases, fail to satisfy all the conditions.

VALUE OF STOCKS AND BONDS.

The value of stocks and bonds may or may not measure the total value of the tangible and intangible properties of a railroad. The market value of the these securities depends on the surplus gained from operation, the dividends paid, the market conditions, and the strategic or latent elements of value. Receivers are

often appointed to preserve *unity* of property; that is one of the franchise values.

COMBINATIONS INCREASE FRANCHISE VALUE.

As the combinations of railroad properties extend the franchise values increase, for the reason that traffic contracts for interchange of business are thus made more secure; and, without these combinations, the traffic held by established railroad companies might be exposed to competition. This control of competition is most frequently accomplished by purchase of control of stocks and bonds or by personal ownership by directors. All this tends toward an increased density of traffic and more efficient organization, resulting in increment in rate of profits.

Mr. Justice Field says: "No constitutional objection lies in the way of a legislative body prescribing any mode of measurement to determine the amount it will charge for the privilege it bestows." The Legislature has not gone further than to say that "the remaining property, including the franchise," shall be valued in some manner.

CHAPTER IV.

STOCKS AND BONDS.

RAILROADS BUILT ON SALE OF BONDS.

The earlier railroads were constructed mainly through the sale of bonds. The stock seldom produced cash and, when it did, it was generally for the benefit of the organizers. We cannot fix the average selling price of these construction bond sales with any certainty. It is stated, by Van Oss, that the average amount originally received in actual value, for American railway bonds, probably did not exceed 68 per cent., and that the original investor in American railway stock did not pay more than 10 per cent. of the face value.

67,000 MILES RAILROAD BUILT DURING 10 YEARS.

During the five years ending in 1873, *twenty-seven thousand miles* of railroad were built and, in consequence, the whole country found itself little short of bankruptcy. The country was yet new and undeveloped and the mania for railroad construction was not appeased. The lull in building was short and, in the five years ending with 1883, *forty thousand miles* more of railroad were constructed. Bonds and stocks were issued freely. In a great many instances, in the earlier stages of construction, construction bonds had to be sold in advance. The purchasers, naturally, demanded a premium corresponding to the risk. In other cases, the promoters had an opportunity to "water"; and they did it freely.

STOCK WATERING.

The charter of the Northern Pacific provided for a subscription to the share capital of the company by the payment of a *full cash equivalent* therefor. The whole nominal capital, to the amount of $49,000,000, was divided among the promoters of this enterprise, little or nothing being paid therefor.

CENTRAL PACIFIC.

The Central Pacific, originally organized under California laws, was made a corportaion of the United States. This road was constructed by the promoters, the greater part of the stock issued coming to them as a gratuity.

ERIE.

The "water" in the Erie was the difference between the par value of some $55,000,000 of bonds (afterwards converted into stock) and the price (about $350 per thousand) at which the bonds were sold. This transaction injected some $36,000,000 of "water."

NEW YORK CENTRAL LINES.

Through the authority of the Legislature, some $48,000,000 of "water" was injected into the New York Central.

"NICKEL PLATE."

The greater part of the capital stock of the "Nickel Plate" ($50,000,000) was delivered to the promoters, on which they realized handsomely by selling same to the Lake Shore and Michigan Central.

The list of "watered" roads could be largely extended.

The larger systems, operating the greatest mileage in New Jersey, are made up of consolidations of minor companies which constructed their several properties on a much more conservative plan. The results of "watering" in other properties was, however, reflected in the market conditions, making it frequently more difficult to market bonds on a comparatively small and conservative enterprise than upon some larger project of questionable merit.

Notwithstanding the immense amount of "water" injected into railroad construction, the amazing growth of the country

has furnished business and profit to the extent of creating real value or earning power assets behind the flood of dead-head stock. Such of this stock as is now listed or regularly dealt in has acquired real value, due to the growth of the country, the better handling of the property and the improved economic methods of operation, coupled with the refunding of bonds at a much lower rate of interest.

RATES OF CARRIAGE.

Rates of carriage have fallen though cost of labor and materials have increased. The earnings from freight per ton mile fell rapidly during the period of great railroad building, as appears in the following table:

Year.	*Name of Road.*	*Gross Earnings Per Ton Mile. Cents.*	*Net Earnings Per Ton Mile. Cents.*
1854	N. Y. C. & H. R. R. R., ...	2.954	1.645
1884	N. Y. C. & H. R. R. R., ...	0.830	0.210
1852	N. Y., L. E. & W. R. R., ...	1.948	0.922
1884	N. Y., L. E. & W. R. R., ...	0.719	0.200
1855	P. R. R., ...	2.746	1.084
1884	P. R. R., ...	0.740	0.299
1857	P. F. W. & C. Ry., ...	2.270	0.700
1884	P. F. W. & C. Ry., ...	0.670	0.180

The present average gross earning per ton mile of freight is .754 cents.

The railroads of this State are among the oldest railroads of this country and, with few exceptions, the railroad systems of New Jersey are made up of many minor corporations. The Lehigh Valley Railroad System is practically the only system owning and operating its property.

The following table illustrates the composition of the various railroad systems in New Jersey:

Name of System.	*Number of Railroad Corporations Forming System.*
Central Railroad of New Jersey,	27
Delaware, Lackawanna & Western R. R.,	11
Erie R. R.,	18
Lehigh Valley R. R.,	2
New York, Susquehanna & Western R. R.,	5
Pennsylvania R. R.,	18
Philadelphia & Reading Ry.,	5
Other corporations,	39
Total,	125

LAW GIVES NO HINT OF METHOD.

If the Legislature had contemplated using the market value of stocks and bonds as a means of measuring "the remaining property, including the franchise," after deducting the value of the real and personal property, it is probable that this intention would have been expressed in the act. There does not seem to be any hint in the acts of 1884 and 1888 to express the intention of the Legislature as to how the value of "the remaining property, including the franchise" was to be established.

STATEMENT OF FUNDED DEBT AND STOCKS.

The manner in which the railroad systems of the State generally are composed is shown in the appendix and is entitled, "Statement of Mileage, History, Capital Stock and Funded Debt of Railroads in New Jersey."

An analysis of the description of the component parts of the Pennsylvania Railroad discloses the various consolidations and purchases, leases and rentals. None of the trackage has been constructed by the Pennsylvania Railroad.

STOCKS NOT DEALT IN.

The "true value" of the stocks of the various companies cannot be determined, for the reason that they are not dealt in on the market; and it cannot be determined whether the basis of rental

gives the several railroad corporations forming the Pennsylvania Railroad System more or less income than might be earned under separate management or whether each road is credited with the full pro rata of its earnings and expenses.

MARKET VALUE INCLUDES ALL INCOME.

The market value of stocks and bonds does not necessarily reflect the values of the railroad property only. Several of the railroad companies operating in New Jersey own securities in coal properties which return them considerable revenue.

The income from other than rail operations of some of the railroads operating in this State is as follows:

Name of Railroad.	*1910.*	*1911.*
Central Railroad Company of New Jersey, ending June 30th,	$4,414,346	$2,276,890
Lehigh Valley Railroad Company, ending June 30th,	1,117,635	1,675,738
Pennsylvania Railroad Company, ending December 31st,	17,458,846	.....
Delaware, Lackawanna and Western Railroad Company, ending December 31st,	26,094,828	.....

The investor is particularly interested in the total net income from all sources and does not generally concern himself as to the division of such net income as between results of strictly rail operations and income from other sources. If, then, we attempt to fix "The value of the remaining property, including the franchise," by using the market value of the stocks and bonds, we are reflecting onto the railroad property under consideration the value of other property which may be in nowise related to it.

For instance, if the market value of the stocks and bonds of the Central Railroad Company of New Jersey is used to determine the value of Subdivision IV., we will have included the profit on the sale of the stock of the Lehigh Valley Railroad and two dividends on the stock of the Lehigh and Wilkes-Barre Coal Company; the first ever paid by that company.

It is apparent that the market value of the securities of the Central Railroad Company of New Jersey is based upon its

holdings of valuable stocks in outside properties. The income from outside sources for 1910 was 30 per cent. of the total net revenue; and, if this outside revenue were wiped out, the revenue from rail operations would be but 70 per cent. at the most.

If, then, the present value of the stock of the Central Railroad Company of New Jersey is $300 per share, the value determined by rail operations alone would be $210. We think that in using the value of $300, assuming that to be the present market value, we would be assessing property other than that owned and used for railroad purposes.

We are confronted with a somewhat difficult problem in the case of the Lehigh Valley Railroad. The outside revenue of that company for the year ending June 30th, 1911, is $1,675,738, and the total revenue $14,490,176, the net income being $7,519,457.

The net income would be increased by about $300,000 were it not that the Lehigh Valley Railroad Company has obligated itself to pay ten per cent. and four per cent. respectively on the preferred and consolidated capital stock of the Morris Canal and Banking Company, and all interest charges, as called for in the lease. The operating loss is about $100,000. In this case, the market value is reduced by reason of an ancient contract which requires the taking of net revenue earned by the railroad proper, for the purpose of paying losses in property which is not used for railroad purposes. This obligation on the part of the Lehigh Valley Railroad Company reduces the market value of the stock, since $300,000 is taken from the net surplus.

GUARANTEED STOCK.

In some cases the value of stocks and bonds have no relation whatever to the value of the real property or the value of the franchise.

The most notable instance of this condition is that of the Morris Canal and Banking Company. On May 4th, 1871, the Lehigh Valley Railroad Company leased the Morris Canal and Banking Company in perpetuity, agreeing to pay 4 per cent. on the common stock, of which there is outstanding $1,025,000, and

10 per cent. on the preferred stock, amounting to $1,175,000; also, 7 per cent. on the bonds, which now amount to $500,000.

The market value of these securities is guaranteed by the Lehigh Valley Railroad Company, and is probably not less than $5,175,000. This value will be maintained regardless of the operation of the canal; and, even though the canal property was abandoned and a majority of real estate reverted to the original owner or to the State, the value of the stock would not in anywise be affected thereby.

The measure of value of these canal securities lies entirely in the value of the guarantee of the Lehigh Valley Railroad, and not in any tangible or intangible value of the canal property.

Many other notable examples are given in the following statement of subsidiary companies of the Pennsylvania Railroad Company, which are operated at a loss, without in anywise affecting the values of the outstanding securities representing the property:

December 31st, 1909.

VINCENTOWN BRANCH OF THE BURLINGTON COUNTY RAILROAD.

1. Operating income,	$5,633 40	
2. Operating expenses including taxes,	7,109 92	
Deficit,		$1,456 52
Rental due from operating company,		900 00
Loss,		$2,356 52

MOUNT HOLLY, LUMBERTON AND MEDFORD RAILROAD.

1. Operating income,	$9,077 29	
2. Operating expenses including taxes,	17,060 13	
Deficit,		$7,982 84
Rental due from operating company,		2,885 00
Loss,		$10,867 84

ROCKY HILL RAILROAD AND TRANSPORTATION COMPANY.

1. Operating income,	$21,733 61	
2. Operating expenses including taxes,	23,037 77	
Deficit,		$1,304 16
Rental due from operating company,		1,222 00
Loss,		$2,526 16

CAMDEN AND BURLINGTON COUNTY RAILROAD.

1. Operating income,	$342,606 07	
2. Operating expenses including taxes,	340,056 58	
3. Available corporate income,		$2,549 49
Rental due from operating company,	$37,415 50	
Less income,	2,549 49	
Loss,		$34,866 01

The annual statement of the Pennsylvania Railroad for December 31st, 1910, shows the total amount of securities of the seventeen subordinate companies in New Jersey to be as follows:

	Stock.	*Bonds.*
Total capital stock and funded debt of the seventeen subordinate companies, including the West Jersey and Seashore Railroad and excluding the Pennsylvania Tunnel and Terminal Company.	$41,697,975	$37,664,200
	15,158,500	6,151,000
	$26,539,475	$31,513,200

Total of the above described stock and funded debt owned by the Pennsylvania Railroad System in New Jersey, 36.3 per cent. of the stock and 16.3 per cent. of the bonds.

The Pennsylvania Railroad Company owns practically all the stock and bonds of the *New York Bay Railroad Company,* which includes the Greenville Terminal for interchange of business principally with the Long Island Railroad and the New York, New Haven and Hartford Railroad. This stock was increased from $1,000,000 par, in 1908, to $6,000,000 par in 1909. The bonds of this line were decreased from $4,975,779 in 1908, to $3,885,000 in 1910.

The Pennsylvania Railroad System owns but 3.3 per cent. of the funded debt and capital stock of the United New Jersey Railroad and Canal Company, the total funded debt being $20,000,000, and the capital, $21,240,400. The State of New Jersey owns $475,000, par value, of the stock. The rental paid to the United New Jersey Railroad and Canal Company by the Pennsylvania Railroad System amounts to 4 per cent. on bonds and 6 per cent. on stock.

In the case of the West Jersey and Seashore Railroad, the Pennsylvania Railroad System owns the controlling interest and operates this line as an affiliated company.

Of the total capital stock, $104,000 par value is called "special guaranteed stock." This stock bears 6 per cent. dividends, while the balance pays 4 per cent.

The stocks of none of the sixteen subsidiary companies are dealt in on the stock exchange or on the curb. The entire capital stock of those numbered 1, 4, 6, 9, 11 and 12 (see table in appendix), is owned by the Pennsylvania Railroad System. The leases under which 7, 10 and 13 are operated by the Pennsylvania Railroad System call for payments to the roads of amounts equalling their net earnings, and practically no payments are being made by the Pennsylvania Railroad to the companies.

The stock of the companies numbered 2, 3, 5, 8, 14 and 15 is closely held, and, after close inquiry among leading bankers, we find that none of this stock has appeared upon the market in recent years. The stock dividends are guaranteed by the Pennsylvania Railroad.

INCREASED VALUE NOT REFLECTED IN VALUE OF STOCKS—DEVELOPMENT NOT REFLECTED IN THE VALUE OF STOCKS.

The value of the physical elements of the various corporations forming the several railroad systems in New Jersey probably does not bear exact relation to the volume of business or to the net earnings, though the development of the properties generally keeps step with the volume of business conducted over the rails. The distribution of the value of "the remaining property, in-

cluding the franchise," to the several subsidiary lines included in the various railroad systems in New Jersey, cannot be made with positive certainty, since there is no accounting of the business of these subsidiary companies, and if accounts were kept many items would of necessity be determined arbitrarily. For the purpose of this valuation, we have apportioned the value of "the remaining property, including the franchise," to the several subsidiary companies on the basis that the miles of all track of each of the several subsidiary companies bears to the total mileage of all track in New Jersey of the particular system in New Jersey in which the subsidiary company is included, except where the earnings are reported. The earnings on the stock are fixed by contracts; consequently, the development of the community *is not reflected* in the value of the stocks of the subsidiary companies, which value is entirely dependent upon the value of the guarantor.

TAX LAW.

Since the State tax law requires us to establish "the value of the remaining property, including the franchise," we have fixed the value of the real estate and the tangible personal property without regard to its use; and the value of the real estate and the tangible personal property as determined by this office includes Subdivisions I., II. and III., under Section 3 of the act of 1888.

In order to establish "true value" at this date, certain deductions have been made on account of depreciation due to decrepitude or obsolescence, described in the chapter entitled "Depreciation."

INTEREST RATES.

The rate of interest on the sum so determined is believed to be sufficient to cover discount and commissions incurred in placing bonds.

FUNDED DEBT.

Considerable sums have been put into the property year by year and charged to income account or capital and, possibly, the property has been rebuilt with such expenditures; and, for such moneys coming from the treasury, there is no charge for commissions or discounts. Yet, a considerable amount of the original bonds is generally outstanding, or represented by refunds at a lower rate of interest. The lowest rate of interest paid by the Pennsylvania Railroad Company is 3½ per cent. on the "10-Year Gold Convertible" due November 1st, 1912, and October 1st, 1915. The balance of funded debt carries from 4 to 4½ per cent.

The general mortgage of the Central Railroad Company of New Jersey carries 5 per cent., and matures in 1987.

The funded debt of the Lehigh Valley Railroad Company carried from 4 to 7 per cent. The $6,000,000 (7 per cent.) matured September 1st, 1910, and were paid by sale of stock, which was increased from $40,334,800 to $80,000,000, June 22d, 1910. $5,638,000 (6 per cent.) matures December 1st, 1923; while $10,062,000 (6 per cent.) is perpetual.

FUNDED DEBT REDUCED.

The funded debt has very likely been largely reduced in many cases and large sums have been taken from the income for betterments. The original bonds were probably sold at a considerable discount. So the present funded debt is no guide to the original expenditure, present value or cost of the real estate and the tangible personal property.

CHAPTER V.

ORGANIZATION, OPERATING COST AND VALUES.

FRANCHISE VALUE OF ORGANIZATION.

A balanced organization is an important factor, both in gross and net earnings. The term "organization" as here used includes both the operating officials and the employees, together with the machinery, equipment, gradients and permanent way; for it is plain that no degree of skill or knowledge on the part of the official staff can overcome inefficient power, unbalanced gradients and lack of equipment.

The organization of the principal railroads of this State is probably as efficient as any in the United States. Therefore, it is reasonable to assume that the relation of organization to net earnings is fairly comparable among the railroads of the State, though there is, perhaps, a considerable difference in the discount and interest rate demanded for financing any considerable permanent betterment. The discount and commission element varies from time to time with the latent or strategic value of the property within and without the State, as well as with the market condition which may affect the real or the fictitious value of the securities offered. We have not deemed it proper to differentiate between the market ratings of the several railroad systems of this State, since the market rating is inconstant, being affected by many changing conditions as well as by traffic arrangements.

In considering organization, we must couple it with all the conditions which make for net earnings, such as location, shortness of line and density of traffic. Shortness of line is, perhaps, a more important element of value than is at once generally appreciated; the shorter the line, the greater the value.

SHORT LINE, LOW GRADIENTS, ETC.

If it were possible to shorten the Central Railroad of New Jersey one mile between Plainfield and Jersey City, the saving in

investment plus the saving in operation and maintenance capitalized would amount to practically $1,500,000. The density of traffic and the operating cost can only be influenced by the organization to a limited extent. In many cases, the line of railway having the least costly roadbed has easier grades and greater density of traffic tributary to it. The business thus naturally gravitating to such a line, plus interchange and through business, enables it to operate trains at maximum loading and at minimum cost per train mile; while a more costly road, in the same territory, with heavier gradients and less density of traffic, is compelled to operate under minimum train loads and at maximum cost. And, while the physical value of the least costly road, as represented by the real estate and the tangible personal property, may total much less than that of its competitors, the commercial value may be much greater, by reason of its maximum train loads and its minimum operating expense.

ABILITY TO PAY TAXES.

The ability to pay taxes is expressed in the corporate net surplus available for taxes and surplus. Consequently, it is to this item we look for a basis of determining the "value of the remaining property, including the franchise."

The financial statement of a railroad company cannot always be taken as the true and complete measure of value of the property, as there may be many conditions and latent values which exist to be brought into usefulness in the future. The financial statements of the better roads do not always show the full value of the assets.

A deficit indicates that, temporarily, somewhere, the property is not successful at that particular time. The alleged cost of the Erie Railroad, as shown in their annual report for 1909, is $174,278 per mile, which, of course, is much greater than the true cost; and, if we used the value placed on the property by the management, we would show a deficit of many millions of dollars.

LATENT VALUES.

Many railroads are projected for future profit rather than for present gain, and the building of a railroad in the face of insufficient immediate business may show wisdom, in view of current prices and prospective earnings.

CONTINENTAL LINES.

The builders of our first Continental lines built on their faith in the country, which was reinforced by a large, government subsidy. There was no near prospect of earnings sufficient to pay interest on the cost of construction. These lines possessed a latent value, which has since developed until these Continental lines are among the largest carriers and earners in the country.

CONSTRUCTION LAGS.

The country is still new, and railroad building lags behind the growth in population and industry. It may not be unreasonable to assume that every railroad now operating at a loss or without profit possesses a value or mortgage on the future development of the community it serves. Since we are required to find present values, we do not consider that we should appraise this possible latent value, which has not been developed and which may not exist; and, where there is a deficit from operation, there does not appear to be any taxable value in Subdivision IV. over and above the aggregate values of the segregated parts of the real estate and the tangible personal property. Indeed, the present "true value" to the owners of such property is frequently less than the naked value of the physical property.

STRATEGIC VALUES.

The owners may be of the opinion that their property possesses a particular strategic or latent value. They may be mistaken and may never realize their hopes. Consequently, we are

not warranted in appraising a value which has not declared its presence by earnings over fixed charges, operating expenses and taxes.

GROWTH OF COMMUNITY.

The growth of a community is largely reflected in the increased revenue of the railroads and, since 74 per cent of the taxes levied on "value of the remaining property, including franchise," is returned to the counties of the State and distributed to the school fund, each community participates in the net surplus gained by the railway.

OPERATING COSTS.

The operating costs are probably increasing faster than the growth of the communities. The operating cost per train mile has increased from $.9839, in 1899, to $1.4337, in 1909; or an increase of 45 per cent. in 10 years. The operating revenues have increased from $7,005 per mile of road, in 1899, to $10,356, in 1909; or 47. plus per cent. The operating expenses per mile increased from $4,570, in 1899, to $6,851, in 1909; or an increase of 50 per cent.

The operating expenses do not include taxes, which have increased, in many States, over 100 per cent. in the last four years. The increase of taxes in four States ran from 106 per cent. to 125 per cent. (See appendix.)

INCREASED DIVIDENDS.

In spite of the increase of operating cost over operating revenue, the per cent. of railroad stocks paying dividends has increased from 33.74, in 1898, to 65.69, in 1908; and the dividend rate has increased from 5.29 per cent. in 1898, to 6.53 per cent., in 1909; an increase of dividend rate of 23.4 per cent., and of stocks paying dividends, 95 per cent. Stated in dollars, $1,818,113,082 par value of the stock paid an average rate of 5.29 per cent., or $96,152,889, in 1898, while, in 1909, $4,920,-

174,118 paid an average rate of 6.53 per cent., or $321,071,626. More stocks paid dividends in 1907, but the average rate was 6.23 per cent., or a loss in dividend rate of 29 per cent. The ratio of operating expenses to operating revenue has increased from 65.24 per cent., in 1899, to 66.16 per cent., in 1909; or 1.4 per cent.

This slight increase in ratio of operating expenses to operating revenues as compared with increase in general cost of operating may be due to more efficient management, heavier power and increased tonnage. The increase in tons carried per freight locomotive from 1898 to 1908 was 33 per cent.

The large increases in rates of pay of train men and other employees during 1910-1911 will, probably, increase the percentage or ratio of operating expense to operating revenue, unless the volume of business and rate for carriage increases.

The average receipts per passenger, per mile, show little change during the last decade. In 1899, the rate was 1.978 cents and, in 1909, 1.928 cents. The average receipt per ton mile for freight is fairly constant. In 1899, the rate was .724 cents and, in 1909, .763 cents.

LINES OF OPERATING REVENUE AND OPERATING COST CONVERGING.

The lines of operating revenues and operating expenses are converging and can only be kept from meeting by decrease in cost of operation and increase in growth of communities.

The maintenance of permanent way and equipment is 41.79 per cent. and transportation, 52 per cent. If the wages are advanced 25 per cent., the net increase will be 13 per cent. of the operating expense.

Since the increased business of the community is the most important factor in the increased dividends, in spite of increase in general expense, it seems reasonable to expect that the community should share, in a moderate degree, in the results it has helped to secure.

Mr. Justice Brewer, in his opinion in the case of *Adams Express Company* vs. *Ohio State Auditor,* says: "Now, it is a car-

dinal rule which should never be forgotten that whatever property is worth for the purpose of income and sale it is also worth for purposes of taxation.

Referring to the *Henderson Bridge Company's* property, the tangible property of which was adjudged to be worth $1,277,695.54, Mr. Justice Brewer says:

> "Suppose such a bridge was entirely within the territorial limits of a State and it appeared that the bridge itself cost only $1,277,000, could be reproduced for that sum, and yet it was so situated with reference to railroad or other connections, so used by the traveling public, that it is worth to the holders of it in the matter of income $2,900,000, could be sold in the markets for that sum, was therefore in the eyes of practical business men of the value of $2,900,000, can there be any doubt of the State's power to assess it at that sum and collect taxes from it upon that basis of value?"
>
> "In conclusion, let us say that this is an eminently practical age; that courts must recognize things as they are and as possessing a value which is accorded to them in the markets of the world, and *no fine-spun theories about situs* should interfere to enable these large corporations, whose business is carried on through many States, to escape from bearing in *each State* such burden of taxation as a fair distribution of the actual value of their property among those States requires."
>
> "The petition for a re-hearing is denied."

An important factor in the market value of railroad stocks may be the direct or indirect value of the bonds, stocks, or other investments which produce a part of the value of its capital stock, and which have a special situs in the other States or are exempt from taxation. Therefore, we find additional reason for saying that the market value of stocks and bonds cannot be properly taken as the measure of the fourth division.

CHAPTER VI.

"THE VALUE OF THE REMAINING PROPERTY, INCLUDING THE FRANCHISE."

A corporation seldom leases a single property; it leases several for the purpose of organizing and grouping in order to create value greater than that of properties integrally.

NET INCOME BASIS OF FRANCHISE.

On the theory that all net income is contributed by taxable property, all elements outside of physical property must be determined with the net surplus as a basis, or the average net yearly surplus for a period of five years or more.

FORMULA FOR DETERMINING NON-PHYSICAL ELEMENT.

Professor Henry C. Adams, in charge of Statistics and Accounts of the Interstate Commerce Commission, has given a most intelligent and comprehensive statement of the various problems attendant upon the construction of a formula for the appraisal of the non-physical value of a railroad. This statement is found in Bulletin 21 of the Department of Commerce and Labor, Bureau of Census, and is entitled "Commercial Value of Railway Operating Property in the United States," 1904. Besides the statement of Professor Adams, it contains articles by various other statisticians and economists.

Professor Adams was called upon to offer a method of procedure which was intended to be a guide in the formulation of a tax law for the determination of ad valorem values, and the duty imposed upon him was entirely different from that imposed upon this office by the State Tax Law and the act under which this work is being carried out; for, since we are instructed to appraise "the value of the remaining property, including the franchise," we are precluded from offering any theory to be used as a basis

for legislation. The Legislature may have intended that "the value of the remaining property, including the franchise," should be determined solely for the purpose of taxation and considered from a different point of view than if the valuation was to be made for the purpose of establishing commercial value, freight rates and the like. The State Tax Law does not express any such intention on the part of the Legislature.

PURPOSE FOR WHICH VALUE IS TO BE USED.

It is evident, to a student of railroad values, that it may be quite reasonable to suppose that there may be different methods of arriving at value, depending upon the purpose of determining the value.

The expenses of the State do not fluctuate violently and there is generally a gradual increase of expenses as the population increases. The non-physical value of a railway may fluctuate to a considerable degree and, consequently, it might be proper, from a legislative point of view, to determine the non-physical value by considering the average non-physical value for a term of five or ten years rather than for a term of one year, during which appraisal is being made, in order to avoid violent fluctuations of the income received by the State from the tax on "the value of the remaining property, including the franchise," or the non-physical value.

CURRENT YEAR BASIS OF VALUE.

We have given this question great deliberation, and do not feel that we can consider any value for Subdivision IV., except that of the calendar year ending January 1st, 1911. Joint Resolution No. 3 does not state specifically that the value of the railroad shall be determined as of any given date; nor does the act concerning inventory and appraisal of railroad and canal property, including franchise, in the State of New Jersey, approved April 12th, 1910, under which this work is being conducted, specify the date at which values should be fixed. The State Board of

Assessors have requested that the values be fixed as of January 1st, 1911, and all returns made in shape for use for the assessment of 1911. This has been done.

All of the railroads in the State are required to make their annual reports to the Board of Public Utility Commissioners as of June 30th, and some of the largest systems date their annual reports to stockholders as of December 31st. These reports to stockholders are not generally available for several months afterwards. Consequently, we have, in some cases, been compelled to use the statements as of June 30th, supplemented by such additional information as we could secure directly from the several companies.

ANNUITY.

It must be assumed that the purpose in determining the annuity is to arrive at legitimate fixed charges, and it must be apparent that this cannot be determined by taking present value as was done in Michigan. The present value of railroads in this State, if based upon cost of production less depreciation and obsolescence, would probably be still greater than the cost to produce the same property at the date it was produced. On the other hand, owing to changes in permanent way, made necessary by increase of weight in power of rolling stock, causing the discarding of many structures, it might, perhaps, be considered as having required an investment cost greater even than the cost of reproduction to-day.

BASIS FOR ANNUITY.

We believe that the State would not be justified in basing the annuity on present value as represented by cost of reproduction less depreciation through decrepitude and obsolescence, but that the State should base the annuity upon the present value of the land owned by the railroad and used for railroad purposes, plus the cost of producing the permanent way and the rolling stock, new, and other personal property; and, in addition to this, so

far as it is possible to determine, the investment cost of any abandoned property should be included, and the total sum of all these elements should constitute the basis of the annuity.

The summary of all railroads in the Michigan report shows that deduction of about 18 per cent. was made between the cost of reproduction and the present value, and the total deduction was $36,318,106.

ADDITIONS AND BETTERMENTS.

The question of whether or not the amounts charged against income for additions and betterments should be deducted from the remainder of the corporate income available after the annuity has been deducted from the available corporate income is exceedingly important. In Professor Adams' form of compilation the total amount of permanent improvements charged to income is taken from the available corporate income after the annuity and taxes have been deducted. It is apparent that the total available income could be devoted to additions and betterments, thereby absorbing the total net surplus, in which case there would be no surplus earnings to capitalize into the value of "the remaining property, including the franchise"; and, under such a plan, if the railroad so desired, it might avoid all taxation on Subdivision IV. by devoting its surplus earnings to additions and betterments and borrowing the necessary amount of money to pay dividends; and, since it may be properly assumed that all additions and betterments increase the assets of the company, it would be absurd to contend that, because the moneys for the payment of these additions and betterments was taken from income, the value of the property was less because there was no surplus to capitalize, when, as a matter of fact, the value of Subdivision IV. is dependent upon the capacity to produce a net surplus and *is in nowise affected by the disposition* of the net surplus.

It may be wise legislation to place a premium on the development of the railroad property in the State by deducting the amount expended for such development from the net available corporate surplus, thereby reducing the taxes of the railroad

company which expends its net surplus in the improvement of the property within the State instead of paying it out in dividends which may be carried out of the State.

We are not asked to suggest methods of administration or legislation. Our duty is to determine the value of the real estate, the tangible personal property and the value of "the remaining property, including the franchise," Subdivision IV. Consequently, the value of Subdivision IV., if based in any degree upon the commercial value as expressed in the capacity to earn, aside from its physical condition, cannot consider any deductions from the net surplus, which is determined after the annuity and the taxes are deducted.

METHODS OF ACCOUNTING.

The method of accounting has a very important bearing upon the question of additions and betterments. Some railroads have been in the habit of charging the greater portion, if not all, of the cost, improvements and betterments to operation and maintenance; and, by this means, the value of the physical property is greatly increased; and this increment is not reflected in their accounts if the improvements are charged to operation or maintenance.

The subject of additions and betterments has been made the basis of extensive investigation by the Interstate Commerce Commission, which has, from time to time, issued the instructions for the guidance of railroad accounting. The classification of expenditures for additions and betterments, first issued, was promulgated under date of June 21st, 1909, and the final instructions of the Commission were issued under date of June 1st, 1910; and these primary accounts are specified under thirty-five separate headings. There is no distinctive difference between the meanings of the words "additions" and "betterments," and the similarity of these terms is conceded by the Commission in the title of the second article under "General Instructions" of the First Revised Issue of "Classification of Expenditures for Additions and Betterments," page 13, from which we quote as follows: "Inclusion of all additions, betterments and deductions."

A considerable betterment to the main line of a railroad in New Jersey may be made for the purpose of reducing the cost of transportation from points far distant beyond the boundaries of the State, and this improvement may, in fact, be a detriment to the State of New Jersey from the point of physical value of the railroad in the State, for the reason that it may eliminate a number of miles of permanent way and track from the value of the physical property.

NO PRECEDENT.

The physical valuation of railways in Michigan, Wisconsin, Minnesota and Texas was not conducted in compliance with any particular tax law of the respective States, and considerable latitude was found for the introduction of theories. In this State, we face a condition, not a theory; and, after having given due consideration to all the questions attendant upon this work, as we understand and estimate them, we have concluded to adopt the following plan for determining the Fourth Division, Section 3:

FOURTH DIVISION, SECTION 3; METHOD OF FIXING VALUE.

A. The investment value of the physical property before depreciation.

This is determined by the present value of railroad lands, used for railroad purposes, plus the present cost of producing the roadbed, track and appurtenances of the permanent way; plus the value of the tangible personal property, plus the abandoned property, if any.

B. Appraised value of real estate and personal property as in "A," less depreciation by reason of decrepitude and obsolescence.

C. This item should include all gross earnings and income of every kind whatsoever, excepting earnings from real estate not used for railroad purposes, such as is described under the tax law of New Jersey as third-class property, and income from securities.

D. Operating expenses, exclusive of taxes, including every item of expenses incurred in operating, hire of equipment, joint facilities, miscellaneous rents paid, etc., except rent of property not used for railroad purposes.

E. Available corporate income. This item is determined by deducting the item of operating expenses (D) from the gross earnings (C).

F. Annuity or fixed charges. Five and one-half per cent. (5½) of "A."

G. Taxes on appraised value as represented in item "B." This rate is based on tax rate used by State Board of Assessors.

H. Income from property not covered by appraisal. This item should include all rentals from third-class property; that is, property not used for railroad purposes.

I. This item includes all payments for interest, exchange, or discount on interest bearing current liabilities; interest on receivers' certificates, notes, open accounts, and other analogous items.

J. This item includes interest on funded debt incurred by loss in operation.

RATE USED IN DETERMINING SUBDIVISION IV.

The determination of the annuity of (F) is of great importance, as a slight variation in the rate applied to the gross investment value (A) will materially affect the surplus available for dividends and, consequently, the value of Subdivision IV. In the plan formulated by Professor Adams the appraised value of the physical elements was taken as a basis and 4 per cent. used as the rate to determine the annuity or interest on capital invested in the physical property.

If this method was applied to the example given the annuity (F) would be $2,400,000 instead of $3,850,000. On the other hand, as we understand the formula of Professor Adams, he deducts from available corporate income (E) all money charged to income to cover additions and betterments.

We have called attention to this important difference feeling that, since we are called upon to establish value, we cannot consider the deduction of money expended for additions and betterments and charged against income, for the reason that the value of Subdivision IV. is expressed in the ability of the property to earn a net surplus after paying all operating expenses and interest on the money invested in the physical property.

INCOME FROM SECURITIES OWNED.

The purchase by one railroad company of securities of another railroad company, or companies, is usually done for the purpose of influencing traffic, or with the expectation of maintaining or securing satisfactory traffic conditions. Therefore, the *value* of such securities is largely, if not entirely, *reflected* in the earnings of the railroad purchasing these securities; and the earnings from operation (exclusive of earnings from property not used for railroad purposes) are increased—or, it is expected that they will be increased by reason of ownership of such securities.

The question whether or not income from dividends or interest on bonds or other securities should be included with income from operation in the determination of the net surplus which is to be capitalized into the value of "the remaining property, including the franchise," has been given deep consideration.

If the income from securities of other companies, held in the treasury of the particular company under consideration, is to be taken at all, we should ascertain the exact amounts invested by the company in question in the purchase of these various securities and allow an annuity on such purchase-money, and deduct this annuity from the net available income. It is very likely that this annuity would equal or exceed the dividends or interest received from the various stocks and bonds.

We are not in a position to ascertain the amount of the actual investment in these various securities; and, since we cannot determine how much of the value of these securities is reflected in the earnings from operation, we have decided *not* to include any part of the income from such investments in determining the net sur-

plus available for capitalization under the formula used for the determination of the Fourth Division of Section 3, which reads as follows: "The value of the remaining property, including the franchise."

We have hereinbefore directed attention to the obstacles in the way of ascertaining the value of stocks and bonds for the purpose of fixing the value of Subdivision IV., and in concluding the argument along this line wish to call attention to the relation which the bonds, stocks or other investments owned by a railroad corporation bears to the net revenue. The ownership of these bonds or stocks of other railroads may bring a direct revenue to the treasury apart from the earnings from operation, thereby increasing the market value of the bonds and stocks of the railroad corporation owning same, and yet these bonds, stocks or other investments of a railroad company may have a special situs in other States or are exempt from taxation.

WEST SHORE RAILROAD.

A notable example of the impracticability of applying the value of stocks and bonds in the determination of the value of Subdivision IV. is the West Shore Railroad. The road extends from Weehawken, N. J., to Buffalo, N. Y., a distance of 423.67 miles (with branches, 479.11 miles). Of this distance, 19.337 miles are in New Jersey, and the appraised value of that portion of the line in New Jersey is $11,402,215.

This road is leased by the New York Central and Hudson River Railroad, which owns all of the stock ($10,000,000 par value) and guarantees principal and interest on the outstanding bonds of $50,000,000, 4 per cent.

The apportionment of stocks and bonds of intrastate roads has been made heretofore by the State Board of Assessors on the basis of miles of route. On this basis there would be apportioned to New Jersey $403,000 of the stock and $2,015,000 of the bonds, a total of $2,418,000, or $8,984,215 *less* than the appraised value of real estate and tangible personal property.

Without an appraisement of the entire system there are no means of determining the ratio of the appraised value as between

the road in New Jersey and the balance of the line. If, however, the accounting of the West Shore is kept according to the Interstate Commerce rules, the results of operation of the lines in New Jersey can be fairly determined.

The Fourth Division, Section 3.

EXAMPLE FOR COMPUTATION.

"THE VALUE OF THE REMAINING PROPERTY, INCLUDING THE FRANCHISE."

A.	Gross investment,		$70,000,000
B.	Present value real estate and tangible personal property,		60,000,000
C.	Gross earnings,	$28,000,000	
D.	Operating expenses exclusive of taxes,	20,000,000	
E.	Available corporate income,		8,000,000

DEDUCTIONS FROM "E".

F.	Annuity on gross investment, 5½% on $70,000,000,	$3,850,000	
G.	Taxes on present value of physical property (B), @ 1.896,	1,137,600	
H.	Income from properties not covered by appraisal,	500,000	
I.	Interest, exchange, discount, &c.,	600,000	
J.	Interest on funded debt incurred in operation,	000,000	
			6,087,600
	Surplus available for dividends,		$1,912,400
	Surplus capitalized at 7.896,	$24,219,858	
	Present value real estate and tangible personal property,	60,000,000	
	Total of all values,		$84,219,858

RATE USED IN DETERMINING ANNUITY.

In the foregoing example, illustrating the method of determining the value of Subdivision IV., we have used the rate of 5.5 per cent. to determine the annuity or interest charges. The rate

of 5.5 per cent. on estimated cost of producing the permanent way, structures and personal property, plus the normal value of the land at the date of valuation, will, in our opinion, produce a greater sum than is paid as interest charge on the property.

The value of the land as appraised includes the increment value which, in many cases, is a large item, upon the value of which no interest is paid.

The discounts and commissions, which were a charge against original construction, have been largely, if not entirely, wiped out by refunding the bonds and by the taking up of bonds through the sinking fund provided from net earnings.

RATE USED IN CAPITALIZING NET SURPLUS.

The rate of 7.896 per cent., used in the foregoing example for capitalizing net surplus to determine the value of Subdivision IV., is six per cent. plus the tax rate of 1.896 per cent.

The capitalization of the net surplus at 7.896 per cent. results in a value to the remaining property, including the franchise, such that it yields a net income of six per cent. after payment of taxes.

It is manifest that, as we develop a value for the non-physical elements included in the "value of the remaining property, including the franchise," we are adding to the taxable value of the remaining property. The tax rate to be levied on the value so found should, we think, be used in some manner as a factor in the computation. We believe that this can be properly accomplished by adding the tax rate to be levied to the basic income rate. By this method, any increase or decrease in tax rate will be reflected in the "Value of the remaining property, including the franchise."

If the same rate were used to determine the annuity or interest on the investment cost of the physical elements as is used for capitalizing the net surplus, we would have a perfect gyroscope; and, in case there should be a net surplus after paying interest on the investment and taxes, and we were only required to know the total value from the point of view of earnings, regard-

less of physical elements, we could then use the net surplus capitalized as the sole factor in determining value.

In the valuation of railroad property for the purposes of taxation, we must bear in mind the distribution of value between the local taxing district and the State. The State, in this case, collects the entire tax on the assessment of all railroad property used for railroad purposes. It returns to the taxing districts the amounts collected on assessments of all railroad property outside of the main stem, the main stem being described to include all personal property, the roadbed not exceeding one hundred feet in width, with its rails and sleepers, and structures erected thereon and used in connection therewith, not including, however, any passenger or freight buildings erected thereon.

All railroad property *not* used for railroad purposes is assessed locally in the taxing district wherein it is located.

The State not only returns to the several taxing districts the money collected from assessments on property outside of main stem, termed "second-class property," but it also returns to the several counties of the State all but one-half of one per cent. of the assessed valuation of all property included in main stem.

It will be seen, therefore, that each taxing district wherein "second-class" railroad property is to be found is deeply interested in the method of determining the value of such property. Each county is interested in the amount assessed to main stem, since the State distributes practically seventy-four per cent. of the amount collected, for State use, to the several counties, to be applied to the school fund of each county.

In order to apportion the value of one hundred and twenty-five separate railroad corporations directly to the several taxing districts having "second-class" property, as well as to the counties interested in the taxes received from the railroads by the State and distributed to the school fund of the counties, it is necessary to appraise the property located in each taxing district; and, no matter what plan is used to determine the total value of a railroad, it is necessary to apportion that value to the several taxing communities as well as to the State. This cannot be done equitably by using the miles of route as a basis of distribution as

has been done or suggested in other States, for the reason that, in this State, terminal properties are of unusual value. The value of these terminals would not be apportioned, even approximately, to the districts of Jersey City and Hoboken, where their great value is found, by using miles of route as a divisor.

It, therefore, appears to be necessary that we carefully appraise the value of all physical elements to the taxing district wherein it is situated; and, while the total value is not materially affected by depreciation or appreciation of value of physical elements within certain limits so long as there remains a net surplus after paying interest and taxes, both the State and the taxing districts must condemn any taxing system or appraisal which does not correctly locate value by civil divisions.

If there were no necessity of apportioning value to the State and to the minor civil divisions, we still could not base the value of a railroad property for the purpose of assessment simply and solely on the capitalization of its net surplus. In some cases, there is a deficit and, in other cases, a nominal net surplus; in either of which cases, there might not be any particular market value to the whole, at the time, due to earnings; and, yet, the physical value might be very large.

The question arises, why do we use 6 per cent. as a basis, plus tax rate, for computing Subdivision IV. We think that this difference in rate should be maintained, for the reason that the intangible values cannot be inventoried; they can only be appraised. Further, the intangible values are subject to fluctuation by reason of State or federal legislation and, being unstable, a larger rate of interest should be allowed than for the known, fixed elements of the physical property.

If the State compels the railroads to lower rates of service and, by reason of such exercise of the sovereign power of the State there is a loss of net revenue, then the value of Subdivision IV, is reduced by $12,664 for each $1,000, and the loss to the State's income will be $240.

If we use 6 per cent. as a divisor, thus ignoring taxes, the value of Subdivision IV. for each $1,000 of net surplus would be $16,667. The taxes on this amount, at the rate of 1.896, would

be $316. By this method, we would reduce the ability to pay taxes by $76 for each $1,000 capitalized.

The present tax rate of 1.896 added to the basis rate of 6 per cent. gives the State 24 per cent. of the net surplus from rail operations after all operating expenses, maintenance, interest and fixed charges have been paid.

The State and Federal courts hold that the State cannot reduce railway rates for carriage below a point necessary to assure a fair return upon the investment in the property; and, in some cases, the "fair return" has allowed interest and taxes on the unearned increment which, as in the case of the tidewater terminals, amounts to a considerable sum.

If the State, in the exercise of its power, fixes such rates as will allow the railroads to earn only the fixed charges, and taxes, on the investment in the property, there will be no property remaining after the tangible property has been assessed. If, on the other hand, rates are so fixed as to permit the railroad companies to earn a net surplus, then every taxpayer in the State will secure a portion of such net surplus, since the State returns to the counties $177 out of each $1,000 of net surplus earned by the railroads; and, in turn, each county distributes this $177 to the school fund of each taxing district. The Civil Division, not having any railroad within its borders, thus participates in the income secured by the State from the assessment on Subdivision IV.

The railroads and the State are thus jointly interested in the question of rates of carriage. On the one hand, the State may favor the direct payer of the rail rates by reducing intrastate rates at the expense of the State and school fund; on the other hand, the State may favor rates of carriage which will enable the railroads to earn a net surplus, of which, *for each $1,000 so earned the railroads keep $760, the State keeps $63, and the school fund receives $177.*

The State may have but limited power to exercise any control over the earnings of railroads operating in the State since the larger part of the profitable business originates outside the State, and is classed as "through" or "interstate business." There is,

however, a large amount of business intrastate, and it is thus within the power of the State to increase or diminish the income to the school fund and to the State from taxes levied on the value of "The remaining property, including the franchise."

The inventory does not include the value of the liquid or working assets, for the reason that the value of such assets are covered in the amount determined in the capitalization of the net surplus.

These working assets include:

Cash.
Securities issued or assured—held in treasury.
Marketable securities.
Loans and bills receivable.
Traffic and car-service balances due from other companies.
Net balance due from agents and conductors.
Miscellaneous accounts receivable.
Materials and supplies.
Bills receivable.
Other working assets.

The working or liquid assets amount to many thousands of dollars in the case of the large railroad systems of this State.

VARIABLE RATE OF ANNUITY.

It seems just to consider a larger rate of annuity in the case of the unclassified roads that are unimportant and whose earnings, be they ever so satisfactory, would not be of sufficient importance to enable them to borrow money or to finance additions and betterments without a considerable discount commission and a rate of interest somewhat higher than the better roads would pay; and, in some cases, it might not be unreasonable to fix the annuity rate at 8 per cent.

For the purpose of this report, however, we have used 5½ per cent. throughout.

DISTRIBUTION OF TERMINAL VALUES OUTSIDE OF STATE.

The tidewater terminals are a part of the entire railroad system and many of the constitutent companies in New Jersey could be operated as efficiently without these terminals outside of main stem.

A well-known engineer was requested to give an estimate of the cost of building a two-track, steam railroad between New York and Chicago. Naturally, he could not furnish such an estimate within reasonable limits without a survey. He did, however, offer the opinion, that the cost of acquiring the land only, for an entrance to New York City corresponding to the New York Central, would aggregate an amount equal to $100,000 for each mile for the entire line between New York and Chicago.

The Pennsylvania Railroad Company has recognized the value of New York terminals, to lines included in its system, lying remotely from New York, and some ten millions of dollars were charged to lines *west* of Pittsburg.

We think that the portion of lines of any interstate system operating in New Jersey with tidewater terminals, made necessary for the business of the system, should not be required to pay the interest charge and taxes on the entire value of the second-class, terminal property.

The interest charge and the taxes are deducted from the net revenue before the net surplus is determined. Consequently, if we charge the annuity of five and one-half per cent. and the taxes on the total value of the terminals outside of main stem, the net income from rail operations may be wiped out; and, since we are called upon to establish the "true value" of the railroads in the State, we think that the annuity should be charged on only the proportion of the value of the terminals outside of main stem which is properly chargeable to the lines within the State.

We are not unmindful of the fact that there are terminals outside the State, the value of which may properly be apportioned to lines within the State. We have charged the annuity on all values within the limits of main stem to the the line within the State which uses same, although a large amount of interstate

business is discharged at the tidewater terminals within the limits of main stem. The length of route within the State is, in most every case, much shorter than the length of route outside the State, while the value of the tidewater terminals in the State is in the reverse proportion.

In the computation of Subdivision IV., we have added the value of terminal floating equipment to the value of the physical property outside of the main stem and have fixed the value upon which the annuity of five and one-half per cent. is fixed by distributing this value within and without the State. After fixing the amount within the State, this amount is distributed to the various constituent companies benefited, on the basis of mileage of all tracks, the value new being taken for calculation of annuity and the present value for calculation of taxes.

EXPLANATION OF METHOD TO RAILROAD OFFICIALS.

In order that the railroad officials operating the various systems in this State might have an opportunity of giving their views as to the proper method of determining the "value of the remaining property, including the franchise," an invitation was extended to the presidents of the various roads to attend a meeting for a public discussion. In response to this invitation the railroads instructed the officials in charge of tax matters to represent them at this meeting. Each official present was furnished a copy of the method hereinbefore described, and the whole plan was fully described in detail at the meeting. None of the railroad representatives offered to discuss the plan, nor did they suggest any plan which, in their opinion, would be proper to use in determining Subdivision IV. The burden of the argument was that any value over and above the market value of the real estate and tangible personal property was due to management and that there should be no value assessed against the railroad corporation to comply with the State Tax Law, which specifically provides for "the value of the remaining property, including the franchise."

The unearned increment or non-phyhical value of a railroad property has a very considerable market value, and this, coupled with the value of the physical elements, is generally termed the commercial value, and this is the value that is considered by a purchaser.

We again call attention to the opinion of Mr. Justice Brewer, who says:

> "Now, it is a cardinal rule which should never be forgotten, whatever property is worth for the purpose of income and sale it is also worth for the purpose of taxation."

We appreciate the high ability of many of the railroad operating officials in this State, and yet we cannot believe that the very large net revenues of the various systems in this State are due to the particular ability of the present railroad officials operating same, but that this large revenue is due to the growth of the community, coupled with the adventitious location of the property, the products of the soil and the production of the mines.

Railroad officials generally are called upon to perform routine work, and while there is an acknowledged difference between the results obtained by one railroad official as compared with another, it cannot be truly said that the difference in safety and economy is due in a marked degree to the railroad official.

The organization of the operating staff of railroads in this State is the result of a considerable period of time, consequently the chief executive of a railroad property is not burdened with the task of creating a new organization, and the general policy of the company is dictated by the banking houses or the boards of directors, which are naturally composed of financiers who, in many cases, have an interest in several of the various railroad companies operating in the State; consequently, there is no particular difference in the attitude of the administration toward the handling of the business of the company.

IMPROVEMENTS NOT GENERALLY DUE TO RAILROAD OFFICIALS.

Practically all inventions and developments attending upon economical railroad operation and safe travel are due to men who are not officers of railroads, but are engaged in the invention and

production of the various equipment of railroads, and this is illustrated each year at the meetings of the Master Mechanics and the Master Car Builders' Association. These conventions are held not only to discuss important subjects relative to the needs of the various operating departments of the railway, but in order that the railway official may see and be instructed in the hundreds of new developments, and various railroad devices are exhibited to them by the designers and manufacturers.

The railroad officials frequently determine rules of standard practice in all of the departments, and, indeed, select the design of apparatus which is generally a selection of what, in their opinion, is the best of the various designs offered by the manufacturer, and this results in many cases in throttling progress rather than advancing it, for the reason that the adoption of a standard design is, in fact, an announcement to the manufacturer that he is not expected to attempt to develop along the line of the particular standard adopted, for if he did he would change the standard, and it is only after the inventor and manufacturer has persisted in developing to a higher plane and produced a result which is far in advance of the standard adopted that such development is acknowledged by the railroads and the standard changed. This practice on the part of the railroad is probably necessary from an economic point of view in the keeping of supplies and parts, but it cannot be justly claimed that in adopting this policy the railroad official is accelerating progress in safety, economy of operation or in maintenance.

The growth of the community is due in part to the facilities offered by the railroad, and in part to the natural increase in population and the higher plane of living, and we think it is impossible to divorce the necessities of the railroad from the necessities of the community, but rather that both should go hand in hand and supplement each other, and since the growth of the community is reflected in the increased net revenue, it seems reasonable to contend that the community and the State should participate in some degree in this increased prosperity, and it appears to have been the intention of the Legislature to provide that the railroad should divide this increased earning in some manner, and in order to set this fact forth prominently in the Tax Law, Subdivision IV. was created.

CHAPTER VII.

MAIN STEM.

The act of 1884, together with the amendments, does not give a clear definition of "Main Stem," and the "Boundaries of Main Stem" has been a subject of considerable controversy in this State.

In the case of the *Central Railroad Company of New Jersey* vs. *The State Board of Assessors,* 46 Vr. 120, 1907, the Supreme Court says, in discussing the line of demarkation between first and second class railroad property:

> (P. 139.) "Practically the line of division is: 'Main Stem' within one hundred feet, waterway, towing-path, bermebank on the one side; these are continuous, running from end to end of the railroad or canal."
>
> (P. 141.) "The distinction between the continuous belt of land, without which a railroad could not exist as a highway, and other sorts of railroad property, was early recognized," etc.
>
> (P. 144.) "The limitation by width is only one of the several limitations that go to make the statutory definition of 'Main Stem.' As defined in Chapter 122 of the Laws of 1906, it does not extend beyond 'the roadbed with its rails and sleepers and structures erected thereon and used in connection therewith,' although this be less in width than one hundred feet. It is only in places where there may happen to be a greater width that the one hundred feet limitation has effect."

Mr. Justice Fort says, in the case of *Mayor of Jersey City et al.* vs. *Central Railroad Company of New Jersey et al., 68 Atl. Rep. 227,* Court of Errors and Appeals, 1907:

> "Every railroad must have a main stem. The one hundred feet of main stem of any railroad must, of necessity,

be selected from that part of its right of way or roadbed, or other property, upon which is laid, or proposed to be laid, the tracks over which its freight and passengers (if it carries passengers) are transported. All tracks outside of the one hundred feet, and the land upon which they are laid, and also tracks used exclusively for chutes into factories, and for yards, and the like, or used in the ordinary transaction of business for cars at rest, are not embraced within this definition, and could not have been intended to be embraced within the term 'main stem' as used in the statute."

BOUNDARIES OF MAIN STEM.

If the boundaries of main stem were limited by the area of land covered by the roadbed not exceeding one hundred feet in width, it is evident that the width of the strip of land constituting the main stem would be constantly varying and the outline of same would be marked by the toe of slope of all embankments and the line of excavation in all cuts; and it would be exceedingly difficult to compute the areas and quantities in the main stem and to fix the proportionate amount between main stem and second-class property.

The practice of the State Board of Assessors has been to fix the boundaries of the main stem by a strip of land not exceeding one hundred feet of uniform width, with its rails and sleepers, and all structures erected thereon and used in connection therewith, not including, however, any passenger or freight buildings erected thereon.

TERM "ROADBED" CONFUSING.

The use of the term "roadbed" apparently confuses the definition of main stem and, for the purpose of this inventory and appraisal, we have followed the practice of the State Board of Assessors in order to prepare our data in such form as to be comparable with previous valuations.

The confusion of thought arising from the interpretation, by various courts, of the term "main stem," and the fact that the law does not seem to be specific, has lead us to suggest a definition of main stem; which will be found in the appendix.

CHAPTER VIII.

LAND AND REAL ESTATE.

LAND VALUE PERPLEXING.

The question of land values is perplexing, especially when we are called upon to eliminate all elements of franchise value arising from the use of the land for railroad purposes.

Mr. Justice Beasley said, in 1886:

LAND VALUE TO BE SEPARATED FROM FRANCHISE.

"Objection is made, in various respects, to the valuations of property which have been returned by the State Board.

"The first exception in this vein is that, instead of ascertaining the true value of the lands of these companies, the Board, after ascertaining such value, multiplied the sum thus settled by the numbers two or three, and adopted the product as the market or true value of the property. It is insisted that by this course these officers have assessed these lands at two or three times their real value."

"But we have failed to see either the illegality or injustice of this part of the proceeding. The problem is not what land for agricultural or building purposes is worth, but what a narrow strip of land, with valuable easements annexed to it, adapted to railroad uses, will bring in the market.

MARKET VALUE OF RAILROAD.

"It seems to us unquestionable that the marketable value of a successful railroad is generally greatly in excess of the value of its roadbed, equipments and other tangible possessions. The location of the road, the

places or territories it connects, its capabilities for future expansion, are all elements going to make up its productiveness as a vendible thing in the market."

This opinion seems to include the intangible or franchise value with real estate. Later, in 1909, after the amendment to the fourth division of Section 3, in 1888, Mr. Justice Garrison said:

ADDITIONAL VALUE IMPARTED BY CHARTER.

"In the ascertainment of the value of second-class railroad property under Subdivision II. of Section 3 of the revised act of 1888 for the taxation of railroad and canal property the State Board of Assessors is required to value such property at the value it has in exchange for money as shown by the testimony, *i.e.*, at its market value. Additional value imparted to such property by its use under a railroad franchise should not be included in such ascertainment.

"The duty of the State Board of Assessors under the supplemental act of March 4th, 1908, is the same and none other than that required of them by Section 3 of the revised act of 1888 recited in such supplement.

"We think that the increase of value over and above its market value that is imparted to second-class railroad property by reason of its use under a railroad franchise should not be included in the valuations of such property by the State Board of Assessors under Section 3, Subdivision II., of the act of 1888, and that the opposite course would be directly contrary to the scheme of such act; in other words, that it is absolutely essential to the integrity of the taxing scheme of this act that the valuation placed upon tangible real property under Subdivision II. of Section 3 of the act shall not include any element of value that is imparted to it by the intangible property, *i.e.*, the franchise that is to be valued under Subdivision IV. of the same section. The reason for this is, we think, clear."

SUPREME COURT SUSTAINED BY COURT OF ERRORS.

The opinion of the New Jersey Supreme Court, delivered by Justice Garrison, from which we have quoted above, has been sustained by the Court of Errors; and, since we are required to find the value of "the remaining property, including the franchise," we consider that the "true value" of the land can only be determined under the law, entirely apart from its use for railroad purposes.

NAKED VALUE.

Having eliminated the element of use, we reduce the question to the naked value of the land, apart from the improvements thereon, and disregard the cost to acquire for railroad purposes. We are not instructed to determine the cost to produce the land. We are required to determine the value.

MAIN STEM LAND NOT A CONTINUOUS STRIP.

The land in the main stem of a railroad is NOT a continuous strip, and would not be available for railroad use unless it was welded together by the sovereign power of the State.

The right of way is frequently broken by cross streets, streams and rivers. The power to cross these streets and waterways is given by the State through the charter to build and operate a railroad. The main stem land is, therefore, merely broken sections or strips of land, and any additional value it may have over the contiguous lands, by reason of the closing of the gaps by the power of the State is, we think, reflected in the value of the remaining property, including the franchise.

TAXING DISTRICTS.

In this State there are some four hundred and fifty taxing districts in which railroads operate. The property in these

taxing districts, other than property used for railroad purposes, is appraised and assessed by the local assessor or assessors of each district.

The term "taxing district" as used in the act "shall be construed to include every political division less than a county where inhabitants or officers have the power to levy taxes; the term "Assessor" shall apply to all officers charged with the assessment of taxes. These assessors are required to file affidavits setting forth as follows:

ASSESSORS' AFFIDAVIT.

> "The foregoing list contains the valuations made by me, to the best of my ability, of all property liable to taxation in the taxing district in which I am the assessor, and that I have valued the same, without favor or partiality, at its full value, at such price as in my judgment it would sell for at a fair sale, by private contract on the twentieth day of May last, and have made such deductions only for debts, and exemptions as are prescribed by law."

FICTION OF THE LAW.

The price agreed upon between a willing seller and a willing purchaser is a realty, quite apart from the fiction of an imaginary price to be agreed upon between an imaginary willing seller and an imaginary willing buyer. The fixing of a definite value as of May twentieth, or any other date, adds to the fiction, as it would be entirely impossible to consummate the sale publicly or by private contract on any given date.

We have the right to assume, however, that, since the several assessors are elected or selected by the taxpayers of their respective communities, they must have had sufficient experience in land values to entitle them to assess the property in their respective districts, and that, therefore, they are the best available source of information concerning the going price or "true

value" of the land in their districts; and, since the several taxing districts are content to accept the opinions of these assessors as to the "true value" of the property of individuals, corporations (excepting railroad corporations) and firms, we should give considerable weight to the opinions of the several local assessors when considering the "true value" of land.

LAND ADJOINING RAILROADS.

In order that we might secure accurate information from the assessors relative to assessed valuation of lands adjoining railroad lands, we prepared "Form 26," entitled "Memorandum of Assessed Valuation of Land Adjoining Main Stem." The County Boards of Taxation were furnished with these forms and requested to send same to the various assessors with instructions from them to indicate thereon the area and the assessed valuation of each tract of land or lot adjoining railroad land. From time to time, a member of our staff was sent to each county seat to supervise these records, and the data so obtained has been approved by the several County Boards of Taxation.

FIELD NOTES OF ENGINEERS.

The instructions to field engineers call for field notations showing the character of land and relative improvements. The field books show this record for each foot of line in the State. In earlier years, the county records showed the consideration paid in the deed of record. Of late years, however, the deed may or may not show the actual amount of the purchase-money. We have not attempted, therefore, to make abstracts from the deed records of the various counties and have supplemented the assessors' records.

LAND.

No per cent. has been added to the value of lands in excess of the value in exchange for money, as near as such value can

be determined by the exchange price of lands adjoining the lands of the railroad in each particular taxing district, and at each particular point where such lands adjoin railroad lands. The cost of acquiring the land has not been taken into consideration, as has been frequently done by other States which have attempted to determine the value of the physical property of railroads, excepting that administration and interest at 7 per cent. has been added to land in main stem. It is generally conceded that a railroad seeking to acquire rights of way through a village, town or city, or through a well improved and highly-developed farming section, must pay, for the land necessary for the right of way, a sum considerably in excess of the rate of the going price of the property they desire to acquire; and, in many cases, where a community is in great need of railway facilities, the cost of acquiring the land is considerably below the value of the adjoining lands.

RECORDS OF SALE.

There are, of course, isolated examples of the sale and transfer of land, but these transfers are so infrequent and the actual purchase price so difficult to determine that it is not considered wise to measure the greater quantities by the lesser.

VALUE AND USE.

The law tells us to eliminate, from our consideration, the purpose to which the land is applied. Therefore, we have valued the land stripped of all improvements as a piece of naked land, in the open market, for any reasonable purpose to which it may be applied. The presence of a railroad, with its embankments, permanent way and structures, and the operation of traffic over same, may depreciate or appreciate the value of the adjoining lands; consequently, the "true value" is so closely interwoven with the value for a specific purpose that it is difficult to determine whether the value of the adjoining lands would be enhanced or depreciated by the absence of the railroad, with its embankments, and the operation of trains over same.

TIDE-WATER TERMINAL LANDS.

The valuation of lands used for railroad purposes other than main stem comprised in the various terminals in Jersey City has been a matter of discussion by the local assessors, the State Board of Assessors and the owners for years. Volumes of testimony have been taken in the various suits relating to the assessed valuation and practically every person able to qualify as a real estate expert for lands in Jersey City and Hoboken City has given testimony as to their values.

ASSESSED VALUE 1910.

The terminal lands in Jersey City used for railroad purposes, exclusive of the area included in the main stem, are valued by the State Board of Assessors for the purpose of assessment, in 1910, at $28,098,933. The terminal lands used for railroad purposes, exclusive of main stem, in Hoboken City, are valued at $2,838,124 in 1910, making a total of $31,937,057 for Jersey City and Hoboken City, or more than 10.7 per cent. of the total value of all the railroad property used for railroad purposes in the State of New Jersey, including the rolling stock and equipment.

LANDS ACQUIRED LONG SINCE.

The majority of these terminal lands were acquired at an early date and a vast amount of material has been required to bring the surfaces of the lands to the present elevation and state. The depth of water in the Hudson River in front of water-front lands is a material factor in considering the value of terminal lands. The area of fast land, its form and general dimensions, location north and south, and possibilities of pier developments, are all important elements in determining values.

During the discussion of the question of land values at a session of the State Board of Assessors, on July 25th, 1911, one

argument advanced was that cost of reproduction was the only "yard stick" to use in measuring the *true value* of railroad lands and that, the railroad terminal lands on the Hudson River from the Central Railroad of New Jersey Terminal to the Delaware, Lackawanna and Western Terminal, both inclusive, were of equal value, acre for acre.

This argument was advanced without any precise knowledge of the total acres in any one of these several terminal tracts, nor of how much of the acreage was fast land, land to the bulkhead line, or land lying between the bulkhead line and the exterior line for piers; nor was the shape or extent of the various plots considered in the statement.

COST OF REPRODUCTION NOT APPLIED TO LAND.

The writer cannot agree with this opinion that cost of reproduction as applied to land areas—especially under the conditions attendant upon the development of large terminal tracts on the Hudson River—is a true measure of true value under the laws of the State as interpreted by its highest court:

> * "Values are not necessarily large where the cost of reproduction would be heavy, while values may be great where the cost of reproduction would be relatively small."

The cost of reproduction as applied to the improvements made upon the land, the permanent way, bridges, buildings, structures, etc., is quite another matter, for the reason that the railroad company could have made these same developments elsewhere. But the particular land needed for the right of way, etc., was fixed by the route or alignment; and, after the route had been determined, the particular land required was fixed and there was little, if any, opportunity for bargain and sale; and the cost to reproduce a similar plot, in a similar locality, would, in most cases—in villages, towns and cities—be accompanied by expensive and tedious condemnation proceedings, and would

* B. H. Meyer, member Interstate Commerce Commission, Bulletin No. 21, Department of Commerce and Labor.

cost many times the going or market value of the same property in the general business of purchase and sale.

Attention is again directed to the latest utterances of our highest court. Mr. Justice Garrison says:

> "The State Board of Assessors is required to value such property at the value it has in exchange for money as shown by the testimony."

Mr. Justice Brewer says:

> "Now it is a cardinal rule, which should never be forgotten, that whatever property is worth for the purpose of income and sale it is also worth for the purposes of taxation."

Assuming, for the moment, that cost of reproduction should be the yard stick for measuring the value of lands for railroad use, is it still true that the values of the various terminals on the Hudson River are the same, acre for acre?

This seems illogical, for it is manifest that we could not purchase a plot of ground equal in area and general dimensions to the Delaware, Lackawanna and Western land, having its center at Exchange Place, Jersey City, for a sum less than many times the cost to produce it near its actual location. But there is no reason to assume that, for railroad purposes, at least, the land comprised within the boundaries of the terminals of the Delaware, Lackawanna and Western Railroad in Hoboken and Jersey City is not quite as valuable for its purpose as if it were further down the shore. At least, it may be truly said, without probable contradiction, that the value of the plot if produced near Exchange Place would not be augmented to the extent of the actual increased cost to produce it there.

The cost to produce the plot occupied by the Delaware, Lackawanna and Western Railroad terminals was probably augmented by the need, on the part of the railroad, of a large tract; and it is not at all certain that the naked land comprised in this area would find a purchaser, if put upon the market in its entirety, at a price equal to the original cost to acquire and grade to its present surface.

As we have stated elsewhere, the value of a railroad as such is in its continuity; and, while it may be held that land outside

of main stem is not an essential part of the main running route, it is essential to the whole; and, indeed, the business of a railroad could not be conducted without these terminal lands.

The terminals of a railroad are a burden upon the whole system. The Pennsylvania Railroad Company charge the Pennsylvania System with ten million dollars of the cost of the New York terminals, although the latter company does not come nearer than 500 miles to New York.

The New York terminals of the New York Central and Hudson River Railroad are such a burden on that company that a plan is now forming to consolidate all the lines constituting the New York Central System into one company, with one general mortgage and a new issue of bonds and stocks, for the reason that the terminal charges are too heavy for the New York Central and Hudson River Railroad Company to bear alone.

The terminal lands cannot be listed among the assets of a railroad company as a separate item. There is practically no price that could be put upon them if it were expected that the railroad company owning and using same was to continue business; and, yet, this necessity should not, I think, be made the measure of their value.

Commissioner Maltbie, speaking for the Public Service Commission of New York, First District, which had before it the determination of the value of the property of the Queens Borough Gas and Electric Company, summarized the estimate of the value of the gas and electric properties by determining the cost of production of same *other than land*. From this amount he deducted depreciation; and, to the sum so obtained, added the *present value* of the land. He thus determined the value of the whole plant—not by taking the cost of reproduction of the whole plant—but, by assuming the buildings and structures at present cost to reproduce, he allowed a reasonable depreciation, and then, to this sum, added the present value of the land. The fair value of the land was fixed below what the "highest estimate a real estate broker thinks might be obtained for the land itself"; "for if the land is appraised on this basis and the buildings on a use-value basis, instead of a scrap-value basis, there would be duplication and inconsistency." Land differs from most property in

that it generally appreciates in value, and the question has been frequently raised—whether land should be included in true value in rate cases at its original cost or at its estimated value at the time the rate is fixed.

MULTIPLE FOR LAND VALUES.

The use of a multiple to determine the cost of reproduction of land owned by railroad companies and necessary for the permanent way, we think, quite proper if we are directly and specifically required to determine the cost of reproducing the land; for, in many instances, the acquisition of a certain, definite piece of land necessary for the construction of a line of railroad requires the expenditure of many times the going price of the contiguous land. The large value of the tidewater terminal lands has been due to the growth of the community, and not necessarily on account of force purchase for the imperative needs of the railroads. This increased value is, therefore, in the nature of an increased increment.

Mr. Justice Peckham says, in his opinion of the case, *Wilcox* vs. *Consolidated Gas Company, 212 U. S.,* decided Jan. 4, 1909:

> "If the property, which legally enters into the consideration of the question of rates, has increased in value since it was acquired, the company is entitled to the benefit of such increase.
>
> "This is, at any rate, the general rule. We do not say there may not possibly be an exception to it, where the property may have increased so enormously in value as to render a rate permitting a reasonable return upon such increased valuation as to render a rate unjust to the public."

The tidewater terminal lands have been acquired gradually as the growth of the community and the increased business of the railroads made necessary, and any increment in value should properly be accredited for the same reason that depreciation of buildings, structures and equipment is a charge against operation.

A new railroad seeking a large tide water terminal in Jersey

City or Hoboken would likely be required to pay a much larger sum than the present terminal lands have cost, plus the increment in value of such lands. This large increased cost would be in the nature of forced purchase and abuttal damages. The true value of the land so acquired could not be determined by such forced purchase and payment for abuttal damages; nor would the value of the railroad acquiring such terminals under such conditions be enhanced by the measure of such increased cost, as it would be in competition with the existing railroads which had acquired terminals at a much lower cost. No addition to the rates for service could be made, on account of the added cost of acquisition, but instead the fixed charges would be increased and the net surplus decreased; and it is likely that this additional cost would be charged off to profit and loss.

This is illustrated by the New York Terminal, exclusive of the Pennsylvania Railroad, to total cost of which, to December 31st, 1909, was $102,495,530.73. The value as carried on the books of the Pennsylvania Railroad Company is $57,495,530.73, the difference being charged against the Surplus Income, or the profit and loss account.

The opinion of Mr. Justice Beasley was rendered before the amended act of 1888.

CHAPTER IX.

REAL ESTATE.

REAL ESTATE.

The term "Real Estate," as used by the Interstate Commerce Commission, includes the following:

> "To this account should be charged the cost of land acquired for use directly in connection with the operation of the road, but in excess of and in addition to that actually required for roadbed or station or terminal grounds, including all expenses incurred in connection, with such acquisition as enumerated in account No. 2 'Right of Way and Station Grounds.' "

Buildings are not classed under the head of real estate, but stand in a class under the title "Station Buildings and Fixtures," account 18, as follows:

> "To this account should be charged the cost of material and labor expended on station buildings, including cost of transportation, station signs, platforms, sidewalks, excavations, foundations, drainage, water, gas and sewer pipes and connections, steam-heating apparatus, stoves, electric light and power fixtures including wiring for same, grading and putting grounds in order after buildings have been finished; electric bells, elevators, and all other material, furniture, or fixtures used to complete the buildings; wells for water supply of stations salaries and expenses of architects; also cost of fences, hedges, turn-stiles, etc., around station grounds.
>
> *Note:*—"This account should not include the cost of similar buildings on docks, wharves and piers, which should be charged to account No. 26, "Dock and Wharf Property."

Under "General Office Buildings and Fixtures," account 19, is the following:

"To this account should be charged the cost of buildings devoted to general office purposes, the cost of all fixtures hereto attached, and the cost of furniture for the equipment of such buildings."

Note:—"If the land occupied by general office buildings is not a part of the right of way and station grounds, its cost should be charged to account No. 3, "Real Estate."

SHOP, ENGINE-HOUSE, TURNTABLES.

"To this account should be charged the cost of buildings to be used as shops (including transfer tables), car sheds, or engine-houses (including cinder and drop pits); turntables; plants for furnishing power or for heating and lighting the buildings; platforms, sidewalks, and outhouses in connection therewith; the oilhouses, sandhouses, storehouses for company's material, scrap bins, appurtenances, etc. This account should include amounts paid for shops, engine-houses, and turntables when erected under contract. If built by the company, there should be charged to this account cost of labor and material; preparing grounds before and clearing up same after construction; foundations; painting; excavation for and lining of turntable pits, and of cinder or drop pits inside or outside of engine-houses; foundations for turntables; loading, unloading, and placing turntables in position; levers, tractors, and stops for handling turntables, sewerage systems; connections with water-supply system, shop wells; architects' fees for drawing plans and supervision of construction; fences and hedges on and around shop grounds; and transportation and incidental expenditures. To this account should be charged the cost of tracks laid on transfer tables and turntables and those leading therefrom into shops and engine-houses; also the cost of all tracks laid in any of the buildings above described."

ELECTRIC POWER PLANT.

The Interstate Commerce Commission makes a plain distinction between machinery which is in an "Electric Power Plant" used to generate power to move traffic on an electric line, and machinery which is used to develop power to operate machinery in a shop or engine-house. We cannot follow the Interstate Commerce Commission classification as a guide to determine as between Real Estate and Personal Property, as their classification is not intended to draw this line sharply, but in a general way only for accounting purposes.

MACHINERY PERSONAL PROPERTY.

It is apparent that machinery does not change from personal property to real estate by reason of its location so long as it is not part of a building.

Therefore, if a stationary engine, which is classified under "Machinery," in Section 21, is removed to a power plant for generating power for operating cars electrically, it still remains personal property.

CLASSIFICATION OF REAL ESTATE.

Real estate has been classified in this report under the following headings:

1. Ash-handling machinery.
2. Aerial Tramways.
3. Ballast.
4. Boilers.
5. Bridges.
6. Buildings.
7. Cables.
8. Canals.
9. Cattle guards.
10. Chimneys.
11. Cisterns.
12. Conduits.
13. Coal-handling stations.
14. Conveyors.
15. Crossing gates.
16. Culverts.
17. Cupolas.
18. Dams.
19. Docks.
20. Electric wiring.
21. Elevators.
22. Fencing.
23. Fixed cranes.
24. Foundations.
25. Gas piping and fixtures.
26. Grain elevators.
27. Heating apparatus.
28. Hydrants.

29. Incline machinery, canal.
30. Interlocking.
31. Lands used for railroad purposes.
32. Lighting apparatus.
33. Lock-operating machinery.
34. Oiling systems.
35. Piers.
36. Pipe lines.
37. Pavement.
38. Planking or guard rails.
39. Reservoirs.
40. Riparian rights.
41. Road-bed.
42. Road crossing.
43. Sanitary apparatus.
44. Sewers.
45. Shafting.
46. Shop fixtures.
47. Shop tracks.
48. Signs.
49. Signal apparatus.
50. Smoke stacks.
51. Storage warehouse and miscellaneous structures.
52. Structures.
53. Switchboards.
54. Tanks.
55. Telegraph and telephone lines.
56. Tile drain lines.
57. Tracks.
58. Track appurtenances in place.
59. Track scales.
60. Tramways.
61. Transfer tables.
62. Traveling cranes.
63. Trestles.
64. Tunnels.
65. Turn tables.
66. Viaducts.
67. Water lines.
68. Water-purifying plants.
69. Water stations.
70. Water tanks.
71. Water-ways.
72. Water works.
73. Wells.
74. Wharves.
75. Windmills.

All structural apparatus of a fixed character not enumerated in the foregoing list are to be classified as "Real Estate."

DEVICE.

We use the term "Structural Apparatus" to distinguish the structure which is involved with machinery (sometimes called "Fixed Machinery")—such as coal and ash-handling devices, conveyors, switchboards and the like, from engines, lathes, drills, shapers, turrets, etc., which are used to furnish power and to assist in constructing some other tool machine or device.

CHAPTER X.

TANGIBLE PERSONAL PROPERTY.

TAX LAW.

The Tax Law of New Jersey specifically declares that all machinery is personal property and says, under Section III., article 3:

> "The term 'tangible personal property' shall be held to include the rolling stock, cars, locomotives, ferry boats, all machinery, tools, other 'tangible personal' property of any railroad company, and the floating, movable and other 'tangible personal property' of any canal company."

The law seems to remove any doubt as to whether machinery is to be classified as personal property or as real estate; and, as the determination of machinery has always been a vexatious question, and the cause of many legal contests, it would seem that it was the intent of the Legislature to define the status of machinery beyond doubt in order that the purpose of the law would be undisputable.

WHAT IS MACHINERY?

The decision of the courts as to what constitutes personal property is so confusing that, without this clear definition as set forth in the tax law of the State, there might be considerable doubt as to how to classify machinery and machine tools. The Interstate Commerce Commission provides for the classification of shop machinery and machine tools, under Section 21 of the "First Revised Issue of Classification of Expenditures for Road Equipment," dated 1909, which reads as follows:

SHOP MACHINERY AND TOOLS.

> "To this account should be charged the cost of machinery and tools placed in shops or engine-houses, including foundations therefor; cost of transportation, load-

ing, unloading, and placing machinery in position. This account includes the cost of stationary engines and boilers, motors, compressors, ash conveyors, shafting, belting, cranes, stationary and portable forges, lifting magnets, hydraulic, pneumatic, and electric tools and machines, and all other machinery and tools in shops and engine-houses, including the small hand tools necessary first to equip a shop."

MACHINES AND THEIR FOUNDATIONS.

It will be observed that, under the title "Machinery," is included the cost of all machinery and tools placed in shops or engine-houses, including foundations therefor, etc., * * * the engines and boilers," etc. Since boilers and foundations are not generally classified under the title "Machinery," we have included these items in the classification of real estate; and, while all devices might be properly termed "Machinery," we have classified such items as boilers, coal-handling machinery, conveyors, elevators, canal-incline machinery, interlocking, lock-operating machinery, shafting, signal apparatus, track scales, transfer tables, traveling cranes, turntables and the like, under the title "Real Estate."

All other machinery and tools, together with all locomotives, steam and electric; passenger and freight-train cars; working equipment and floating equipment; and all supplies, of every kind whatsoever, are to be included in "Tangible Personal Property."

In order that there may be no question as to the various classes of equipment included, we ennumerate the classification as follows:

PASSENGER CARS.

In this account (passenger-train cars) is included the value of passenger-train cars of all classes, including all appurtenances, furniture and fixtures necessary to equip them for service, including cost of transportation.

The following cars are classified as "Passenger-Train Cars":

Air-brake instruction,
Baggage,
Baggage—express,
Baggage—mail,
Baggage—mail, express,
Buffet,
Business,
Cafe,
Chair,
Colonist,
Combination—passenger and baggage,
Dining,
Emigrant,
Express,
Library,
Mail,
Milk.
Observation,
Officers,
Parlor,
Parlor—baggage,
Passenger,
Passenger—baggage—mail,
Pay,
Postal,
Refrigerator—express,
Smoking,
Street,
Tourist.

FREIGHT-TRAIN CARS.

Under "Freight-Train Cars" is included the value of freight-train cars of all classes, including all appurtenances, furniture and fixtures necessary to equip them for service, including cost of transportation.

The following cars are classified as "Freight-Train Cars":

Beer,
Box,
Cabin,
Caboose,
Charcoal,
Coal,
Coke,
Dump (commercial, coal or stone),
Flat,
Fruit,
Furniture,
Gondola,
Gondola—hopper,
Gondola—long,
Gun trucks,
Hay,
Lime,
Logging,
Oil tank,
Ore,
Platform,
Poling,
Poultry,
Produce,
Rack.
Refrigerator,
Stock,
Tank and water (when used as commercial cars).

WORK EQUIPMENT.

In this account is included the value of all work equipment, all appurtenances, furniture and fixtures necessary; also, cost of transportation.

The following equipment is classified as "Work Equipment":

Ballast,
Ballast—unloader cars,
Boarding,
Bridge,
Camp,
Cinder,
Concrete mixer,
Derrick,
Dirt spreader,
Ditching,
Dump,
Dynamometer,
Grading,
Gravel,
Indicator
Locomotive tanks (used permanently as water car),
Outfit,
Painters,
Pile drivers,
Rail saw,
Salt,
Sanding,
Scale test,
Snow dozer,
Snow drags,
Snow plows (not attached to locomotives but moved by them),
Sprinkling,
Steam shovels,
Steam-wrecking derricks.
Supply,
Sweeper,
Tool,
Tool and block,
Water,
Weed burner,
Wrecking.

FLOATING EQUIPMENT.

This account includes the value charged to the cost of marine or floating equipment of all kinds, including all appurtenances, furniture and fixtures necessary to equip same for service, including cost of transportation.

The following equipment is classified under "Floating Equipment":

Barges,
Canal boats,
Car and other floats,
Dredges,
Ferry boats,
Lighters,
Power launches,
Power lighters,
Scows,
Steamboats,
Steamships,
Transfer boats,
Tugboats,

ADDITIONAL PERSONAL PROPERTY.

In addition to the personal property hereinbefore enumerated is included such equipment as steam and electric locomotives and all materials and supplies of every character whatsoever possessed by the railroad companies and located in New Jersey.

INTANGIBLE PERSONAL PROPERTY.

Intangible personal property is represented by the stocks, bonds, notes and the like, the value of which is included in the formula for the determination of the value of franchise.

CHAPTER XI.

NOTABLE CASES OF EXCEPTIONABLE CONDITIONS.

THE LACKAWANNA RAILROAD OF NEW JERSEY.

The Lackawanna Railroad of New Jersey presents the finest type of railway construction. Its twenty-eight miles of length make one continuous monument to the engineer who has engraved the name "Lackawanna" in Intaglio and Relievo on the face of the rugged hills of Warren county.

Traffic has not yet vivified the masses of earth, rock and concrete. It is now simply a roadbed lying across the country, lifting its level fully one hundred and twenty-five feet above the valley in places or cutting deep into the rock of the hills.

Measured by bulk of quantities, it overtops by hundreds of thousands of yards any railroad bed of equal length yet constructed; and, in one stretch of three miles, the earth of the adjacent valley has been piled in a prism averaging eighty feet high, with an extreme height of one hundred and twenty feet, supported on a base over four hundred feet in extreme width. River and valleys are spanned by colossal concrete arches reaching to one hundred feet in span, upon which are grouped minor arches reaching to the level of the roadbed. From the parapet of the highest bridge to the surface of the land is fully one hundred and twenty feet. There are no crossings of highways at grade, all being carried over the road, which lies in excavation by graceful concrete arches, or carried under and through the embankment by concrete passages. The signal cabins are of concrete, fashioned to please the sense of beauty, in which the architect has been unqualifiedly successful.

The water-station tanks or standpipes are the only steel structures in evidence; nor is there any wooden element, excepting the ties, for even the fence posts are of concrete. The track is of 101-pound steel to the yard, secured to the tie plates and ties by screw "spikes," the latest practice. The traffic will be protected and controlled by automatic block signals.

The purpose of this "Lackawanna Cut-off" is, as the title implies, to save distance and grades, the distance saved being eleven miles in thirty-nine miles. The saving in operating expense by reason of the lifting of hundreds of thousands of tons hundreds of feet in elevation, plus the elimination of eleven miles of travel, will probably be sufficient to pay an interest charge on double the amount expended in this gigantic work, which has required three years to complete.

The question naturally arises as to the "true value." for the purpose of assessment for taxation, of this mass of construction. Many hundreds of acres of land have been taken from outside the normal right of way to supply the millions of yards which, in the three-mile embankment before referred to, exceeds six million cubic yards.

It is obvious that the net earnings, by reason of the saving in distance and lessening of grades, would be greater by the exact amount of the difference in interest charge and maintenance expense attendant upon a similar line in an easier territory, preferably a uniform plane. How, then, can it be rightly held that the value bears any relation to the cost of construction, or vice versa, since a less costly line having the same location and grades would require a smaller interest charge and less cost for maintenance?

This "cut-off" is a cyclopean machine made necessary for the economic conduct of the ever-increasing business of the Delaware, Lackawanna and Western Railroad. By this machine, increased net surplus will be forged from the gross income, in the same manner as the colossal hydraulic press fashions the armor plate. There is nothing but scrap value in the hydraulic press, unless there is a necessity for its use. The fabricator would, naturally, prefer to avoid the outlay of capital for this press, or tool, if he could, without this tool, perform the same work as is being done by his competitor.

The original location of the Delaware, Lackawanna and Western Railroad between the termini of this "cut-off" was simply the temporary path to greatness, to be used only until the traffic warranted the construction of the more costly highway, which when completed and used for both the freight and passenger

through traffic, will depreciate the present "true value" of the old, and longer, route now operated between these termini.

When this "cut-off" is brought into operating use, the net surplus due to the operation of the line between these termini will be increased notwithstanding the increase in fixed charges due to the interest on this large investment. If this expected increase in net surplus did not admit of satisfactory demonstration, it is not likely that the work would have been undertaken.

The use and occupancy value of this "cut-off" is not only demonstrated by the interest charge during construction but by the eagerness, on the part of the Delaware, Lackawanna and Western Railroad, to gain the advantage of its use by opening it to traffic for both passenger and freight business as soon as the last block signal is in place—and December 24th, 1911, has been appointed for the beginning of traffic over this "cut-off."

It is evident, then, that the management believe that the saving in operation of passenger traffic warrants them in opening the line to both passenger and freight at the same time; otherwise, the efficiency, stability and safety of operating a new work would be tested by operating the freight traffic only for a period of time.

During construction, the county and State are obligated to furnish protection to the company constructing; and, while there has been no occasion to call for protection, this protection was at all times ready; and, in addition, the corporation was given the right to take and use such land as the construction required.

The "true value" of an incomplete structure cannot be measured by the same templet as used for determining the value of the finished work, operated as a railroad. The estimated cost of construction must have included a sum for payment of taxes, just as it must provide for the payment of interest during the time of construction, for taxes and interest are both necessary, and inevitable charges which are always attendant upon construction.

The method of determining the value of the intangible or non-physical elements comprised under Subdivision IV., of Section 3, of the Amended Railroad Tax Act of 1888, as hereinbefore set forth, provides that the value of the non-physical

elements is dependent upon the net surplus; and this net surplus is determined by deducting the cost of maintenance, the taxes and the interest on the normal value of the land, plus the cost of producing the roadbed, structures and equipment, from the gross income from rail operation. By this method, the railway company is credited with five and one-half per cent. on the investment cost. Therefore, as the cost of construction increases the value of Subdivision IV. decreases. In the case of the "cut-off": Assuming the cost to be nine million dollars and the net earnings from operation nine hundred thousand dollars, the value of Subdivision would be determined as follows:

Interest on $9,000,000, @ 5.5%,	$495,000
Taxes on $9,000,000, @ 1.896,	170,640
Total deductions from income,	$665,640
Corporate income,	900,000
Net surplus,	$234,360

Net surplus capitalized at 6% plus the rate of 1.896=7.896.

Net surplus ($234,360) capitalized at 7.896%,	$2,968,085
Value of physical elements,	9,000,000
Total value,	$11,968,085

If this "cut-off" could have been constructed at $1,000,000, the physical value would be decreased by $8,000,000 and the non-physical value increased, for the manifest reason that a greater net surplus would be developed.

The determination of value for the purpose of taxation is illustrated as follows:

Interest on $1,000,000 @ 5.5%,	$55,000
Taxes on $1,000,000 @ 1.896,	18,960
Total deductions from income,	$73,960
Corporate income,	900,000
Net surplus,	$826,040

Net surplus capitalized at 7.896 gives:	
Value of Subdivision IV,	$10,461,499
Value of physical elements,	1,000,000
Total value,	$11,461,499

It will be seen that the total value for assessment, as shown in the last example, using 1,000,000 as the basis, gives a lower sum by $506,586 than the first example, using the investment value of $9,000,000 as the basis; and it may, we think, be properly contended that, from the point of view of the investor, the "cut-off" costing $1,000,000 is the more valuable.

It must be borne in mind that the intangible element is open to fluctuations and we think that, in the proportion that the net surplus is increased by the reduction of fixed charges due to interest on the investment, the total value for the purpose of taxation should decrease.

In this connection, it is important to note that the addition of the average tax rate of 1.896 per cent to the basic rate of 6 per cent. is an important factor in the problem.

In the first instance, the net surplus is 234,360, which, if capitalized at the basic rate of 6 per cent., yields a value of $3,906,000; which, added to the investment of $9,000,000, in the construction of the "cut-off," makes a total of $12,906,000. In the second case, the net surplus is $826,040, which, capitalized at 6 per cent., yields $13,767,333, and, added to the investment of $1,000,000, makes a total of $14,767,333.

The importance of adding the tax rate to the basic rate is thus illustrated, as any increase in the tax thus reduces the amount of Subdivision IV.

The increase in economy of operation of this shorter, easier line will be reflected through the main line between Hoboken and Buffalo, and there will probably be no accounting kept of the rail operations of this particular piece of trackage after it has been merged, as to operation, into the main line. The State, therefore, must consider the physical value as the main factor of distribution of value to the State.

The possibility that a "cut-off" corresponding to this in shortness of line, ease of grades and permanency of construction

could be built for any sum less than this "cut-off" has actually cost is entirely speculative and beyond the possibilities of reasonable consideration. As a part of the system which will operate over its rails, it is, we think, a tool of commerce worth what it cost, less depreciation, if there be any due to obsolescence in methods of construction.

It seems to us that the "cut-off" was not a railroad on January 1st, 1911. The land was taken and used for railroad purposes; but the incomplete roadway offers no opportunity for railroad use, *i. e.*, the carrying of traffic and the exaction of tolls.

We, therefore, recommend that the assessment for taxation be made on the basis of one-third of the investment, or a total of $2,310,366 with a nominal value of $1,000 for Subdivision IV.

HUDSON AND MANHATTAN RAILROAD.

In the determination of the "true value" of the Hudson and Manhattan Railroad, we have first to consider the depreciation on account of decrepitude and obsolescence, as well as the unusual conditions attendant upon its construction and use.

There is little loss of value due to decrepitude, excepting in portions of the power plant and other electrical equipment. The depreciation due to obsolescence is caused almost entirely by the knowledge gained in the construction of the subacqueous tunnels crossing the Hudson River.

Our estimated value, new, of that portion of the property situated and operated in New Jersey is $13,508,383. This estimate has been depreciated to $12,009,724 to cover decrepitude and obsolescence,

We do not think that the present value of the property is shown by this sum of $12,009,724, for the following reasons:

This public utility has been constructed for the carrying of passengers, and is not organized for the general business of transporting freight and passengers. The income of surface railroads generally is largely derived from freight; and, in the case of the larger railroad systems in the State, the bulk of the business is through freight. In the case of the Central Railroad

of New Jersey, only 19.21 per cent. of its revenue for the last fiscal year was earned from passengers carried; and the Delaware, Lackawanna and Western Railroad showed about the same division of earnings.

The revenue of the Hudson and Manhattan Railroad being derived solely from local passenger business, its full commercial value cannot be determined until its full normal capacity is used.

As a transportation machine it is too costly for the present volume of business, measured by the capital invested in it. It may be compared with a one hundred-horsepower engine running a forty-three-horsepower machine.

It was necessary to construct the tunnels, power house and terminals on a scale in harmony with the ultimate capacity offered to the public, but not at present used by it. The total capacity planned provided for the transportation of about two hundred and twenty million passengers.

For the year ending December 31st, 1910, forty-nine million ninety-one thousand six hundred and forty-one passengers were carried. For the year ending June 30th, 1911, fifty-two million seven hundred fifty-six thousand four hundred and thirty-four passengers were carried.

It will require the carrying of about one hundred and twenty million passengers to earn sufficient to pay fixed charges and operating expenses.

The surface railroad is generally constructed in such manner as to accommodate the business in sight, or likely to be found in the near future; consequently, the original construction does not require the investment of a sum approximately equal to the cost of the ultimate development; and, in the case of some surface railroads, the betterments and additions are made from earnings.

It seems reasonable to consider the present value of the Hudson and Manhattan Railroad Company, for the purpose of taxation, on the basis of the proportion of its use by the public. We estimate that, when one hundred and twenty million passengers are carried, during the fiscal year, the earnings will be sufficient to meet all operating expenses and fixed charges, at which time the assessment should be made at the full one hundred per cent. of

the value of the cost of producing the physical elements in the condition found.

For the assessment of 1911, we estimate that but forty-three per cent. of the estimated present value of the physical elements should be used. This does not mean that the public is now using forty-three per cent. of the ultimate capacity of two hundred and twenty million, but that they are using forty-three per cent. of one hundred and twenty million; and that, when one hundred and twenty million passengers are carried, the full one hundred per cent. on value of physical elements should be assessed for taxation.

Our estimate of the present cost of producing the physical elements is $12,009,724, and forty-three per cent. of this amount is $5,164,181, which, together with a nominal value for Subdivision IV. of $1,000, makes a total of $5,165,181, which is the amount recommended for the assessment of 1911.

CHAPTER XII.

DEPRECIATION OF ROLLING EQUIPMENT AND MACHINERY.

The term "depreciation" is not definitive, and there is, at this time, a great deal of discussion among railway officials as to what is intended to be covered by the term. Depreciation may be divided broadly under two heads: First, depreciation on account of decrepitude (the gradual wearing out or destruction of the parts, or materials in the parts, which cannot be renewed) and such depreciation continues until the useful life is ended and there remains nothing but scrap value. The second broad division of depreciation may be covered by the term "obsolescence," and this term may be applied differently to the various subordinate parts of the railroad property.

OBSOLESCENCE.

The demands of traffic call for the highest efficiency in motive power equipment and roadbed and, frequently, the design of the locomotive is so materially changed as to affect the design of the bridge, turntable, engine-house, machine shop, and the like; so that depreciation due to obsolescence of a main factor in transportation may affect all factors which of themselves have not been directly affected by obsolescence. For instance: The engine-house, turntables, scales, and the like, the use of which is considered good practice on our important trunk lines, will have to be abandoned if the contemplated plans for change in design of motive power are carried out; and this change in design seems necessary in order to increase the train load, reduce the cost per train mile, and assist in counteracting the increased cost of operation due to advance in price of materials and labor.

INTERSTATE COMMERCE COMMISSION INSTRUCTIONS.

The Interstate Commerce Commission has instructed the railroads to provide a depreciation account for the equipment of their roads; and these instructions provide, generally, that a monthly charge should be computed at a certain rate per cent. on the original cost (estimated if not known), record value and purchase price of such equipment. Charges should be made to this account during the life of the equipment, except in cases where same attains a greater than normal life; in which cases charges should cease when the difference between the original cost, the record value or the purchase price and the estimated scrap value shall be charged to this account. No instructions are furnished for determining the rate per cent.; and, since this must necessarily vary in each case, according to use and up-keep, it does not seem reasonable to suppose that any fixed percentage can be used for determining the depreciation of each class of equipment. The depreciation required by the Interstate Commerce Commission is *not* for the purpose of determining value; it is for the purpose of providing a fund into which maintenance can be charged.

DEPRECIATION SHOULD NOT BE CONFUSED WITH MAINTENANCE.

The terms "maintenance" and "depreciation" are often confused, but it should be apparent that depreciation is intended to cover an intangible quantity which cannot be maintained either because of its decrepitude or its obsolescence.

EFFECT OF INVENTION.

It is not essential that a machine or locomotive be operated and worn out in order to be depreciated; for the reason that progress in invention, especially in this country, is so rapid that obsolescence generally occurs within a short period, due to important changes in design; and, although a high-class

machine might be kept in a dust-proof case, and not used, it would materially depreciate within a period of three or four years. If it were an automatic tool, for a specific purpose, it would be depreciated to a considerable amount immediately upon its purchase, because the improved design of a second machine for the same purpose would, without question, materially increase the output and reduce the cost.

BARGAIN SALE VALUE.

The electric locomotives of the Pennsylvania Railroad Company, operated by the Pennsylvania Tunnel and Terminal Company and used to haul trains from New York Station, at 33d street, through the tunnel and up to Harrison, N. J., on the Pennsylvania Main Line, cannot be used at any other place in the United States except, perhaps, within the electrical zone of the New York Central and Hudson River Railroad—or at Baltimore. Consequently, there is no general bargain and sale market for this particular equipment and it is not likely that there will be any market for same; and, if we view the present value for the purposes of taxation strictly on the bargain and sale value, our value will have to be confined to scrap material; and, while the foregoing is, perhaps, a more striking case than exists generally in the equipment of a railroad, it is referred to in this report to direct attention to the difficulty of using bargain and sale value in the appraisal of the true value of the many departments of railroad mechanism.

These electric locomotives cost practically $39,000 each and, although they may be, probably, in better condition than when they were first put into service, because they are thoroughly tuned and adjusted, it is not likely that they could be sold in any market.

DEATH OF CAPITAL.

It is frequently held that depreciation is the death of capital to the amount of the depreciation; but it must be remembered that, in this death of capital, there may have been created an

asset very much in excess of the dead asset. This increased value to the general property may be covered by good will, franchise, increment, etc. Some of our foremost railroad officials object to the picking out of one element of a railroad, such as equipment, and depreciating it unless certain other elements are appreciated, thereby admitting that there is a very large element of value outside of the naked value of the depreciated equipment, structure and other elements forming the physical property.

NEW EQUIPMENT GENERALLY OF INCREASED CAPACITY.

Additions to power and road equipment are generally of larger capacity than the last equipment purchased, in each particular class; and, as such additional equipment of increased power and capacity is purchased, the remaining equipment is depreciated by obsolescence, even though no depreciation has occurred by reason of decrepitude. In the case of power, the cost of maintenance increases with the age, and it is reasonable to expect that the cost per mile run will be very materially increased when the life of the locomotive is prolonged beyond certain limits. For years efforts have been made by the railroad officials to determine the limits of economical use of power, and as yet no formula or plan has been generally adopted for the determination of the useful life of power or road equipment.

MASTER CAR BUILDERS.

The Master Car Builders' Association has determined upon a depreciation curve for fixing the value of cars destroyed by fire, and the rule adopted by that association calls for a value of not less than 40 per cent. of the original value of the car. This rule, however, is not intended to fix the full depreciation of a car, but rather to protect the owner of a car which has been destroyed on a foreign road and to insure that the owner will receive at least 40 per cent. of the original value.

CONTINUED IMPROVEMENTS.

The railroads of the United States are compelled to continue improvements for each particular part of their motive power and equipment which will, in any degree, increase efficiency, capacity and economy; and, for that reason, the designs are constantly changing. In contrast to this practice, the railroads of Great Britain do not encourage change. Mr. Richard Price-Williams, in an article published in the "Proceedings" of the Institute of Civil Engineers, London, says:

> "The large amount annually expended out of the revenue of a railway company in the maintenance and renewal of particular parts of the machinery of a large number of its locomotives, in order to maintain the whole in a fit and serviceable condition for the convenience of its traffic, of itself affords sufficient evidence that there can be no appreciable depreciation in either condition or value when by this constant renewal of the worn-out working parts of the machinery the entire stock is maintained in a serviceable condition, and that depreciation can only occur when the working parts have not been maintained in a proper and serviceable condition."

It is apparent, from the foregoing, that Mr. Price-Williams does not consider the question of obsolescence as a factor in the depreciation of locomotives in Great Britain; whereas, in the United States, it is a very important factor.

FREIGHT-TRAIN CARS.

The value of freight-train cars, as a part of the working organization, it is quite apart from their bargain and sale value, and this feature of value is forcibly expressed by the rulings and divisions of the American Railway Association.

Until late years, it was the practice to charge foreign roads for the use of cars on a mileage basis; that is, so much for each mile of travel for each car. Under this system many abuses

arose, and neither the consignee nor the railway borrowing the car was particularly active in freeing same and returning it to its owner. Cars would stand for days and weeks, since the borrower's interest ended as soon as the car ceased traveling.

PER DIEM FIFTY CENTS.

The dissatisfaction on the part of the leading roads resulted in a per diem rate of fifty cents per car. This seemed well enough so long as traffic was heavy and cars were in demand; but, when the great surplus of over 400,000 cars developed, in 1908, and miles of sidings and yard tracks were filled with thousands of idle cars and their equivalent locomotives, then the burden of $200,000 per day became so tremendous that every borrower hastened to return every freight car home to stop the per diem charge. To do this cost many hundreds of thousands of dollars. Many borrowing roads sought to cut the rate in two; and, finally, on February 21st, 1910, it was agreed, by vote of the majority, that the rate for the use of freight cars should be thirty cents per car per day for the five months of March, April, May, June and July of each year and thirty-five cents per day per car for the remaining seven months.

VALUE OF CAR FOR OPERATING.

A president of one of the most important coal roads in New Jersey stated, at a special meeting of the American Railway Association, during a discussion of the per diem rate: "At thirty-three and one-third cents per day it is cheaper for everybody to hire cars than to own them themselves.". At the rate of thirty-three and one-third cents per day, capitalized at five per cent., the value of a car, including maintenance and repairs, would be $2,430, which is more than twice the purchase price.

FACTOR OF DEPRECIATION.

While the useful value, for the purpose of a railroad needing freight cars, fluctuates materially and has no direct bearing on

the purchase value, this element of use should be considered as a factor in determining depreciation.

DEMAND FOR CARS.

The early part of 1906, culminating in March with a shortage of 150,000 freight cars, with a minimum shortage in July of less than 10,000 cars, is in contrast with 1908, which showed a surplus of over 400,000 cars, in April, with practically no shortage. The year 1907 was a well-balanced year in the demand for freight-train cars, there being a practically even demand, with less than 50,000 surplus cars generally throughout the year. The surplus and demand kept even pace until December, when the surplus went up to 200,000 cars.

The year 1909 showed a considerable improvement over 1908. In January there were practically 350,000 idle cars, with little shortage, which dwindled to about 25,000 idle cars in October of that year. One thousand nine hundred and ten showed a still great improvement in demand.

DISTRIBUTION OF DEMAND.

The use and earning capacity of the freight cars for the years 1906 to 1910, both inclusive, for the railroads in Group II., comprising New York, New Jersey, Delaware and Eastern Pennsylvania, having the second largest mileage of any group, will be fairly illustrative. In none of these years was there an excess of cars in use over the number of cars owned:

	Per Cent. Total Cars	*Average Miles Per Car*	*Average Daily Earnings.*		
Year.	*on Line.*	*Per Day.*	*Per Car Owned.*	*Per Railroad Car on Line.*	*All Cars on Line.*
1906, ...	99.5	23.9	$2 29	$2 48	$2 28
1907, ...	93.0	24.3	2 39	2 55	2 35
1908, ...	95.0	21.2	2 50	1 99	1 96
1909, ...	95.5	23.2	2 19	2 29	2 15
AVERAGE, ...		23.15			$2 18

EARNINGS OF FREIGHT CARS.

The foregoing table shows the average miles run per day to be 23.15, and the average earnings per car $2.18. The income from freight cars for 1909 figures on the number of cars in service earning revenue, that is, on 2,067,884 cars, is $1,643,967,780.

If the earning of the freight cars were capitalized at 5 per cent., the resulting value would be $31,018,260,000, or nearly three times the commercial value of all the railroad property of the United States, as estimated by the Interstate Commerce Commission in 1904, namely, $11,244,852,000.

This capitalized value of freight cars is entirely apart from the passenger cars.

The equipment of a railway must be maintained to a higher degree of efficiency than the equipment of a stationary plant in order to furnish satisfactory service to the public. Certain safety appliances are required by the Federal Government, and, aside from the probable expense arising from casualties as a common carrier, the earning power of the railroad is affected by the maintenance as well as the design of each particular piece of rolling stock. These conditions emphasize the necessity of overcoming decrepitude and obsolescence as far as possible.

The question of useful life for any requirement presupposes a thorough knowledge of the nature of the service, and the railways in this State keep the equipment up to date in efficiency and design by following up closely in maintenance and by vacating equipment as soon as intangible depreciation and obsolescense approach inefficiency.

The annual expenditures for maintenance must be sufficient to make good all tangible depreciation. It is the exception when equipment is not improved in design, durability and service by a thorough overhauling in the shops.

Few railway companies have made careful study of the percentages of depreciation, and fewer companies make public the information so gathered.

One of the largest railway companies shows the average amount of equipment vacated from 1902 to 1909, both inclusive, by percentage, as follows:

Locomotives,	2.85 per cent.
Passenger-train cars,	3.45 " "
Freight-train cars,	4.92 " "
Common-service cars,	3.83 " "

LOCOMOTIVES AND DENSITY OF TRAFFIC.

The useful life of a locomotive may be considered as twenty years, unless extended, by the application of a new boiler, to thirty years. The density of traffic and the amount of duty put upon locomotives in this country is far greater than in Great Britain or on the Continent.

In Group II. the number of locomotives in use was 13,777 in 1906, or .547 locomotives per mile of road operated. According to the Board of Trade Returns for 1906, there were then in the United Kingdom 22,118 locomotives for 22,936 miles of line, or practically one locomotive for each mile of track against .547 locomotives per mile of track in this country.

In 1897 there were 16,886 locomotives in the Kingdom, the average cost of maintenance and renewal being $989. This amount rapidly increased to $1,215 per engine, or about ten per cent. of the average cost of locomotives in Great Britain.

The locomotives of the Kingdom are maintained to a high standard, and, while the percentage of cost of maintenance to original purchase price is high, the rate of intangible depreciation should be correspondingly low.

OBSOLESCENCE IN EQUIPMENT.

During the last five years there has been a large increase in Group II., as shown by the following tables:

SUMMARY OF EQUIPMENT. GROUP II.

LOCOMOTIVES.

	1904.	1905.	1906.	1907.	1908.	Per Cent. More 1908.	Per Cent. Less 1908.
Passenger, ...	3,044	3,045	3,264	3,274	3,273	7.5	....
Freight, ...	6,566	6,830	7,485	7,816	7,953	21.0	....
Switching, ...	1,834	1,854	2,143	2,265	2,320	26.0	....
Unclassified, ...	79	77	72	67	65	....	21.5
Leased, ...	537	739	814	950	....	....	....
Total, ...	12,060	12,545	13,777	14,372	13,611		

ASSIGNMENT OF EQUIPMENT PER 1,000 MILES OF LINE. GROUP II.

LOCOMOTIVES.

	1904.	1905.	1906.	1907.	1908.	Per Cent. More 1908.	Per Cent. Less 1908.
Passenger, ...	132	131	138	137	138	4.5	....
Freight, ...	285	293	316	327	334	17.0	....
Switch, ...	80	80	90	95	88	10.0	....
Unclassified, ...	4	3	3	3	3	....	33⅓
Total, ...	501	507	547	562	563		

SUMMARY OF EQUIPMENT. GROUP II.

CARS.

	1904.	1905.	1906.	1907.	1908.	Per Cent. More 1908.	Per Cent. Less 1908.
Passenger, ...	11,369	11,466	11,823	12,107	12,389	8.9	....
Freight, ...	445,056	441,761	465,545	498,791	520,241	16.8	....
Company, ...	13,666	14,645	16,749	17,785	18,784	37.0	....
Leased, ...	88,720	78,517	99,508	135,529	.....	....	....
Fast Fr. L. S.,...	17,672	18,010	18,792	19,047	18,412	4.0	....
Total, ...	576,482	564,399	612,417	683,259	569,826		

ASSIGNMENT OF EQUIPMENT PER 1,000 MILES. GROUP II.

CARS.

Passenger, ...	494	493	499	507	521	5.0	....
Freight, ...	19,333	18,976	19,660	20,879	21,742	12.0	....
Company, ...	594	629	707	744	765	28.7	....
Total, ...	20,421	20,098	20,866	22,130	23,028		

ASSIGNMENT OF EQUIPMENT TO AMOUNT OF TRAFFIC. GROUP. II.

Passengers carried per locomotive,	87,275	90,371	91,722	98,316	95,454	9.0	....
Passenger miles per locomotive,	1,874,006	1,930,165	1,989,716	2,164,724	2,164,678	15.0	....
Tons carried per freight locomotive,	63,053	65,254	68,010	72,455	58,170	....	8.0
*Tons mile per frt. locomotive,	7,256,025	7,481,237	7,700,669	8,118,634	7,593,575	4.6	....
Passenger cars per million passengers carried,	43	42	39	38	40	....	75.0
Freight cars per million tons of freight carried,	1,075	991	915	881	1,119	4.0	....

A study of the foregoing tables, giving summary of equipment in Group II., shows that the railways are vacating their lighter equipment rapidly.

BOX CARS.

The increase in 50-ton box cars was 245 per cent. during the five-year period. The cars ranging from 5 to 30 tons show marked decrease, especially in the 15-ton class.

* NOTE.—Ton miles per locomotive increased 16 per cent. from 1904 to 1907, inclusive.

STOCK CARS.

The jump in the 50-ton stock cars is still more remarkable, being 5,746 per cent. The 40-ton stock cars have also increased enormously during this period, there being 1,263 per cent. more 40-ton stock cars in 1908 than in 1904. The decrease in 15-ton cars during this period is 846 per cent.

FLAT CARS.

Flat cars do not show as much increase, except in the large cars. The increase in 50-ton cars is 201 per cent. The decrease in light cars is noticeable in this class. Even the 20-ton cars show a loss of 54 per cent.

COAL CARS.

The increase in capacity of coal cars is more marked than in any other class. 50-ton coal cars have increased 232 per cent., and 55-ton cars, 498 per cent.

In 1905, a new class of 100-ton cars was created. 200 of these cars were built but no additions have been made, and it does not appear at this time that this large capacity car is to be generally adopted.

FREIGHT LOCOMOTIVES.

The number of freight locomotives increased 21 per cent. during the five-year period. The traction force is vastly increasing. In 1904, there were 85 Class E-5 four cylinder compounds, tractive force, 62,800 pounds. This class has increased 87 per cent. in five years.

A new class of equipment was created in 1908, when three Class A-8 locomotives were built with 94,800 pounds tractive force, an increase of 51 per cent. For detailed statement of equipment of all railroads in the United States, for years 1904 to 1908, both inclusive, see appendix.

The purpose of presenting and analyzing the statements concerning motive power and equipment is to direct attention to the elements of depreciation, which cannot be directly expressed by tangible decrepitude.

There is no market for equipment which becomes too light even for the branch lines of a large railroad system.. There has been little railroad construction during the past five years and, while the development of new and larger capacity equipment does not call for the immediate vacation of the light equipment, the result is a large decrease in the value of the light equipment to that particular company, and it quickly degenerates to its scrap value.

TRUE VALUE OF EQUIPMENT.

For the reasons hereinbefore recited, it is believed that the true value of equipment can be established only after careful consideration is given to all the elements which affect value; and, for this reason, every phase of the question has been gone into. Decrepitude and obsolescence do not measure the full amount of deduction from original cost in years of lean business, when there are many thousand idle cars. The percentages of depreciation used by railroad companies in accordance with Interstate Commerce requirements are not for the purpose of establishing present value of equipment.

CHAPTER XIII.

DEPRECIATION OF FLOATING EQUIPMENT.

FLOATING EQUIPMENT.

There is no well-defined and generally accepted formula for determining the depreciation of floating equipment. The factor of improved design or more efficient machinery does not apply to river and harbor craft with the same force as to ocean-going vessels. It is not likely that ferry boats will increase their speed, as their present speed capacity is in excess of possible use except for brief emergency. Some of the cross-river boats are powered the same as the boats in 23d Street service in order to go into service should occasion arise. The general dimensions of these ferry boats are practically determined and any material change in dimensions is not likely, for the reason that the slips, floats and ferry houses are designed to accommodate boats of the dimensions now in use, and any material change in such dimensions would necessitate changes in the slips.

EFFECT OF RIVER TUNNELS.

The abandonment of ferry service on account of the opening of the Hudson and Pennsylvania tunnels must be considered. It is likely that there will be an increase of revenue from ferry boats because of increased team freight paying larger tolls as the passenger traffic is deflected to the tunnels; but, since a considerable amount of the cost of the ferries is in the ornamental finish, floors, etc., ferry boats for freight service only can be constructed at less cost. So far as ferry boats are concerned, there is no considerable depreciation chargeable to obsolescence, excepting by reason of abandonment of this class of service. The upkeep is generally good and the painting of the hull and superstructure defends, to a large degree, against the wearing effect of the elements.

HULL MUST BE MAINTAINED.

On account of the absolute necessity of a tight hull, it must be maintained in perfect condition so far as the buoyancy and the necessary strength are concerned, and these factors do not permit of neglect as in land equipment. Consequently, the charge for maintenance largely occupies the place of depreciation, and, indeed, under the process of maintenance or upkeep, especially in wooden boats, the hull is constantly changing its members, until all that remains is the design. This is illustrated by the barge "Cornelia," which commenced its official life as a schooner in 1839. In 1864 it was changed to a sloop and in 1881 it became a Pennsylvania Railroad barge. It is still in service and will, probably, continue in service as long as barges of its dimensions are found desirable to operate.

METAL HULLS.

In the case of metal hulls, plates are renewed and, since the original skin is comparatively thin, no material depreciation is contemplated for many years, and as the plates are renewed from time to time a considerable portion of the depreciation is wiped out and the scrap value increased.

TUG BOATS.

The necessity of considering the obsolescence of the machinery, boilers, etc., of tug boats is more apparent; and, yet, there has been no unusual change in design of power for several years past. Economies in development of power are gradual and, in many cases, fall under the item "Maintenance;" and for some years the engines are improved by operation, and any defective parts due to material or design are replaced. There is no particular strain due to buffeting by the sea. The boilers in many of the best boats are more than ten years old and no renewals are being considered. When such renewals are made, they generally consist of superior boilers, and they are charged to "Maintenance" or "Additions."

STEAM LIGHTERS.

A steam lighter has the lightest service, as it is moved to the pier while the cargo is placed; then it makes a short trip, probably not averaging three miles, and ties up to the pier until the cargo has been unloaded and, possibly, a return load taken. The strain on the boilers of the steam lighters may, however, be greater than the strain on the boilers of ferry boats, for the reason that uniform steam pressure is not maintained.

CAR FLOATS.

The car floats are subjected to considerable strain and the depreciation on this account, especially in the case of wooden hulls, is considerably more than on account of decay. In the case of steel barges, however, the life of the hull is somewhat equal to that of the hulls of steam or sailing vessels in harbor waters; and the percentage of the scrap value to the original value is much larger than in any other form of floating equipment.

BOOK VALUES NOT CHARGED.

* The reports of the Pennsylvania Railroad Company for 1907-8-9 (the other railroads in the State do not report book value in their annual statements) do not show that any depreciation is made in the asset account of floating equipment. No doubt, a considerable sum is charged each year to operation or surplus in order to provide a fund to keep the equipment up to date. On the other hand, this asset account is not credited with new equipment, and it seems to be the theory that the upkeep takes care of the depreciation; and, therefore, no charge is made in the asset account as far as the published statement is concerned. Yet, the value of the floating equipment is increased by additions.

The book accounts of the custodian of the property probably

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* *Note.*—Pennsylvania Railroad Statement, 1910, shows increase value floating equipment, $569,455.44.

vary from the annual statements; and, in fact, the estimated present value furnished us by the Pennsylvania Railroad Company is considerably higher than is shown in their annual statement.

The practice of maintaining a constant asset value for the purpose of the annual financial statement, for the information of the security holders, is perhaps entirely proper and to be recommended, as it insures a conservative estimate of the naked values behind the securities, provided always that maintenance is kept up to or in advance of depreciation.

The tangible depreciation can be maintained. There is, however, an intangible depreciation which cannot be maintained, and in the survey of each vessel this must be considered.

NEW YORK FERRIES.

The city of New York operates ferry boats of similar design and in similar service. These municipal boats are not maintained with the same degree of care as the equipment under consideration. The question of depreciation on this municipal equipment has been the subject of much debate, and the so-called "Prentice Bill," calling for an arbitrary annual depreciation, was offered. This bill was opposed by the Department of Docks and Piers, and the following is the opinion of Auditor Phelan:

> "In regard to the deductions during each fiscal year for depreciation from the original valuation of each item of the floating plant used in the ferry service, the amount to be charged off for depreciation of floating plant is a very uncertain quantity. The plant will be always kept in excellent condition and repair. New boilers, tubes, etc., etc., will be supplied as required, the cost of same being charged to repairs and maintenance. The plant will, therefore, be always kept in first-class condition and allowed to suffer little depreciation. In order to show the care which should be taken in charging off the depreciation when the property is carefully looked after and kept in good repair, I might instance the one hundred-ton

floating derrick "City of New York," which is in almost constant use. It was built about thirty-six years ago and its value in 1882 (the first year I find a record of its value) was placed at $95,000. At the present time its value is estimated at $110,000. If a charge of, say, 5 per cent. for depreciation had been made each year, this derrick would have been wiped out of existence almost twice over, so far as the accounts of the department would be concerned, while, as a matter of fact, it is just as valuable for the uses and purposes of the department now as when it was built.

"It would be difficult, therefore, to decide upon a sum to charge off each year for depreciation and the amount, if any, to be so charged off should be left to the discretion of the Dock Commissioner."

The auditor does not contend that any depreciation should be written off. The Prentice Bill was not passed.

OCEAN-GOING BOATS.

The manager of one of the most important ocean steamship lines operating in affiliated interest with a large railroad system contended with the chartered public accountants who prepared the annual statement for his company that they were charging off too large an amount to depreciation in reducing the asset value of the floating equipment 5 per cent. annually, and, after the final argument of the manager, the directors decided on an annual depreciation of 3 per cent. The depreciation on ocean-going vessels should be increased over inland water service because of the greater strain and obsolescence. If, then, the depreciation of 3 per cent. as determined in the case mentioned is correct, a somewhat less amount should be charged off to cover the intangible depreciation of inland water equipment, such as is under consideration.

We have conferred with custom-house surveyors, marine insurance underwriters and surveyors, Lloyd's agent *et al.*, and have endeavored to gain knowledge of the practice from all

reliable sources. The practice of the marine underwriters does not assist us. Vessels are surveyed each year, or oftener, and insurance rarely, if ever, exceeds a period of one year.

A ferry boat thirty years old, costing originally $200,000, may have required the expenditure of $150,000 plus interest on original cost of maintenance, the total sum of which may equal the original cost.

The "Mary Powell," built in 1861, is well known to travelers on the Hudson River and, though forty-nine years old, it is to-day considered one of the speediest and best boats on the river. Thousands of dollars have been spent in its up-keep and this boat is held by the owners to be in the class of up-to-date boats, such as the "Hendrick Hudson" and the "Robert Fulton."

The President of the Hudson River Day Line, owner of the "Mary Powell," says, under date of December 9th, 1910: "The 'Mary Powell' was thoroughly overhauled this fall and was on the dry dock of Tietjen and Lang, at Hoboken, for a long time and every particle of weakened or rotten wood was removed, new hog frames put in and the boat thoroughly overhauled from stem to stern; at the end of which time, Mr. Lang, one of the most expert wooden-boat builders in this country, said that the "Powell" was good for twenty years. Our contention is that there is no old 'Mary Powell.'"

MAINTENANCE FUND.

Depreciation for the purpose of establishing present value should not be confused with cost of maintenance. It is, of course, necessary to provide a fund for maintenance, and this may be done either by charging an item to established requirements for up-keep and additions or by charging a depreciation to operating expenses available for up-keep, renewals and additions. Every ferry boat, tug, lighter or other equipment having machinery, a metal hull or any other metal member, has a scrap value which is practically constant so far as it is reasonable to consider such items in any broad plan for depreciation against the intangible loss in value. This scrap value should be deducted

from the naked replacement value before any depreciation is deducted from the asset value, since the asset value never falls below the scrap value.

AMORTIZATION.

In addition to the cost of maintenance, there are the elements of decrepitude and obsolescence, spoken of hereinbefore under the title "Depreciation." The cost of maintenance has been provided for by deducting same from rail revenue; and the amortization has been provided for by the depreciation.

The depreciation shown in the final summary of this report is thirty per cent. We do not intend to convey the impression that, in making this large depreciation, the efficiency of the railroads is thirty per cent. below par; for, indeed, the railroads in the State are maintained in first-class condition to serve the various classes of service required.

The Interstate Commerce Commission, in its classification of operating expenses, requires a depreciation on equipment only. There is no fixed rate of percentage for depreciation, and this question is left open for the individual determination by each railroad company.

CHAPTER XIV.

OPERATION OF FLOATING EQUIPMENT.

DOMICILE AND SITUS OF FLOATING EQUIPMENT.

The floating equipment of the Pennsylvania Railroad Company, the Central Railroad Company of New Jersey, the Erie Railroad, the Delaware, Lackawanna and Western Railroad, and the Lehigh Valley Railroad operate generally within the lighterage limits bounded on the north by Fort Lee and 135th Street Piers on the Hudson River, and 155th Street Pier on the Harlem River; on the south by Avenue C, Bergen Point and Owl Head, Richmond Avenue, Borough of Kings.

Several railroad companies deliver freight to the Jersey shore throughout the frontage extending from South Amboy to Edgewater. From these main-shore terminals the movement of the floating equipment radiates over and upon the waters of the Hudson River, the Harlem River and the East River, Upper New York Bay, the Kill von Kull and the Arthur Kill—with the exception of certain tugs and barges which are operating entirely in coastwise coal traffic between South Amboy and points as far east as Boston, such as the Delaware and Raritan Canal barges, numbering 700 to 722, inclusive. These barges never enter the canal and seldom enter within the lighterage limits before described and they are moored, when idle, on the Jersey shore of the Arthur Kill.

FLOATING EQUIPMENT; WHERE ASSESSED.

The floating equipment included in this report is generally drydocked on the Jersey shore and, when idle, is tied up on the Jersey shore, the vessels engaged in the traffic of the Central Railroad Company of New Jersey between New York City and Atlantic Highlands being tied up at Communipaw.

The question to be determined is whether or not this equipment, or any portion of it, should be assessed by the State of

New Jersey; and, in order to determine this matter, a careful study has been made of the decisions affecting this question. The State of New York does not tax the floating equipment referred to, and it is believed that the equipment is not taxed in New York for the reason that its home port, its situs and its domicile are in the State of New Jersey, though enrolled in the port of the city of New York, which port includes Hudson and Bergen counties, New Jersey.

HOME PORT; ENROLLMENT.

A vessel's home port is that port established by law, at or nearest to which the owner resides. (See "Customs Regulations.")

The name of the home port does not of necessity fix the domicile in a particular state or city, excepting as established by law. See Revised Statutes U. S., 2d Edition, Title XXXLV., Chap. I., Section 2535, from which we quote as follows:

> "*Second.* The District of the City of New York; to comprise all the waters and shores of the State of New York, and the counties of *Hudson* and *Bergen* in the State of New Jersey, not included in other districts; in which New York shall be the port of entry."
>
> "Section 2541. There shall be in the State of New Jersey six collection districts."
>
> "*First.* The district of Newark; to comprise all the waters and shores of that part of the State of New Jersey lying north and east of Elizabeth and Staten Island, extending eastward as far as the Kill von Kull where it empties into the Bay of New York; including all the waters and shores of Newark Bay and the rivers and bays tributary thereto, the northern shore of the strait or passage known as Kill von Kull, and all that part of the western shore of the strait or passage known as Staten Island Sound, or Arthur Kill, which lies north of the northern boundary line of the town of Rahway, as bounded on the twenty-second day of February, eighteen

hundred and sixty-nine; in which Newark shall be the port of entry, and Elizabeth a port of delivery."

"*Second.* The district of Perth Amboy to comprise all the waters and shores within the State of New Jersey from the northern boundary line of the town of Rahway, as bounded on the twenty-second day of February, eighteen hundred and sixty-nine, to Barnegat Inlet; in which Perth Amboy shall be the port of entry and New Brunswick and Middletown Points ports of delivery."

PORT OF NEW YORK.

It will be observed that the term "Port of New York" comprises not only all the waters and shores of the State of New York but, also, the counties of Hudson and Bergen as definitely described in Section 2535.

A resident of Hudson county, New Jersey, who is the owner or the managing owner of a vessel must, therefore, enter and document his vessel at the custom house in New York City. The Federal Government thus ignores boundaries of states and groups or associates a part of the State of New Jersey with the State of New York; and, therefore, the name of the port of entry does not necessarily disclose the domicile of the owner of the vessel other than to fix his domicile within the "District of the City of New York"; and any owner of a vessel domiciled within the limits of the District of New York, even if he be a resident of Hudson or Bergen counties, New Jersey, as described, is required by the law to enter his vessel at the custom house in the City of New York.

DOMICILE OF OWNER IS THE SITUS.

The decision of the Federal Courts seem to determine that the *domicile* of the owner is the *situs* of the vessel for the *purpose of taxation,* wholly *irrespective* of the place of enrollment.

EQUIPMENT NOT ALWAYS ENROLLED.

Attention is again directed to the enrollment of the floating equipment of the various railroads partly in the port of New York and partly in the port of Perth Amboy and, further, to the fact that a considerable portion, in value, of the equipment *is not entered, enrolled or documented* in any district.

The broad use and purpose of the floating equipment is not affected by the district in which it is documented; or whether it is documented at all; or whether the managing owner resides in the State of New York or in Hudson or Bergen counties, New Jersey. The following citations bear on the question:

Ayer and Lord Tie Company vs. *Commonwealth of Kentucky*. Error to the Court of Appeals for the State of Kentucky; United States Supreme Court # 268. Argued April 27th, 1906; decided May 21st, 1906.

> "The general rule as to vessels plying between the ports of different states and engaged in the coastwise trade is that the domicile of the owner is the situs of the vessel for the purpose of taxation, wholly irrespective of the places of enrollment, subject to the exceptions that where a vessel engaged in interstate commerce has required an *actual situs* in a state other than that which is the domicile of the owner, it may there be taxed because within the jurisdiction of the taxing authorities.
>
> "Vessels owned by a corporation domiciled in Illinois, and which, although enrolled at a Kentucky port, are not engaged in commerce wholly in the state, but are engaged in interstate commerce and which have acquired a permanent situs for taxation, and are taxed in another state, are not subject to taxation by the State of Kentucky; nor is their situs for taxation therein on account of their being enrolled at a port of that state.
>
> "But if enrollment at that place was within the statutes, it is wholly immaterial, since the previous decisions to which we have referred decisively establish that *enrollment is irrelevant* to the question of taxation, because the power of taxing vessels depends either upon the

actual domicile of the owner or the permanent situs of the property within the taxing jurisdiction."

SITUS OF PERSONAL PROPERTY.

Yost vs. *Lake Erie Transportation Company,* Circuit Court of Appeals, Sixth Circuit, 1901. 112 Fed. 746:

1. "Taxation—Jurisdiction of state. Situs of personal property.

"To enable a State to impose a valid tax upon personal property it must have jurisdiction over the owner, or the property must have acquired a situs therein, separate from the owner's domicile, for the purpose of taxation.

"The distinction between the nature of vessel property engaged in the navigation of the sea or interstate waters and the movable property of a railroad company employed in interstate commerce, was pointed out by Mr. Justice Gray in *Pullman's Palace Car Co.* v. *Pennsylvania, 141 U. S. 18, 23; 11 Sup. Ct. 876, 878; 35 L. Ed. 613, 616,* where the justice said:

" 'Ships or vessels, indeed, engaged in interstate or foreign commerce upon the high seas, or other waters, which are a common highway, and having their home port, at which they are registered under the laws of the United States, at the domicile of the owner in another state, at whose ports they incidentally and temporarily touch for the purpose of delivering or receiving passengers or freight. But that is because they are not, in any proper sense, abiding within its limits, and have no continuous presence or actual situs only at their legal situs.'

"The New York Court of Appeals in *People* v. *Commissioners of Taxes and Assessments for City and County of New York, 58 N. Y. 242, 246,* in discussing the uncertainty of taxing situs of vessels engaged in interstate or foreign commerce, if the situs fixed by the registration was to be disregarded, said:

"'To determine the situs, for the purpose of taxation, by their longer or shorter stay in a particular port or by their more or less frequent resort to it, would introduce perpetual uncertainty which would practically subject them to taxation in every port or exempt them in all. We are of the opinion that the rule adopted in the case of the United States Courts, and followed in the judgment appealed from, is the better rule, and is in accordance with the statutes regarding taxation in this State.'"

ENROLLMENT OF PENNSYLVANIA RAILROAD EQUIPMENT.

The equipment of the Pennsylvania Railroad Company is enrolled by Lewis Neilson, Secretary of the Pennsylvania Railroad Company, with offices in Philadelphia.* It would appear, therefore, that the Pennsylvania Railroad Company has declared the domicile of this equipment to be nearest to the district of the City of New York and, since this district includes Hudson county and part of Bergen county, New Jersey, the term "Port of New York" includes the various terminals of the Pennsylvania Railroad Company on the Jersey shore, where the equipment is operated from and where it is berthed.

If the Pennsylvania Railroad Company held that the domicile of the owner of this equipment was at Philadelphia, or in any part of Pennsylvania, they could not have enrolled it in the "District of the City of New York."

The same remarks apply to the other railroad floating equipment of this State.

The equipment of the Central Railroad of New Jersey is enrolled in the name of the Central Railroad Company of New Jersey, with offices in the City of New York.

The ferry boats of the Erie Railroad Company are enrolled in the name of A. G. Grymes, Superintendent of the Marine Department. All other equipment is enrolled under the names of the captains or masters of the boats.

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* *Note.*—The equipment is reported to the State Board of Assessors as being the property of the United New Jersey Railroad and Canal Company.

The floating equipment of the Delaware, Lackawanna and Western Railroad Company is enrolled in the names of W. H. Truesdale, E. E. Loomis, A. D. Chambers, E. T. Hallock and J. M. Emery, with offices in the City of New York.

If we determine, then, that the domicile of the equipment under consideration is in New Jersey, or in any part of it, or in the "District of the City of New York," we suggest consideration of the opinion of Chief Justice Beasley, *Central Railroad v. State Board of Assessors, 49 N. J. L. (20 Vroom) I.*

The Chief Justice cites the *Pullman's Palace Car Company* v. *Pennsylvania, 141 U. S. 18.* In that case the opinion was delivered by Justice Gray, from which we quote as follows:

> "Ships or vessels, indeed, engaged in interstate or foreign commerce upon the high seas or other waters which are the common highway, and having their home port, at which they are registered under the laws of the United States at the domicile of their owners in one state, and are not subject to taxation in another state at whose ports they incidentally and temporarily touch for the purpose of delivering or receiving passengers or freight. But that is because they are not in any proper sense abiding within the limits, and have no continuous presence or actual situs within its jurisdiction, and therefore can be taxed only at their legal situs, their home port and domicile of their owners."

APPLICATION OF THE LAW.

We have proceeded with the survey of all the equipment of the Pennsylvania Railroad Company, the Central Railroad Company of New Jersey, the Erie Railroad Company, and the Delaware, Lackawanna and Western Railroad Company in New Jersey-New York waters, the Lehigh Valley Railroad, the Lehigh Transportation Company, in the belief that these equipments are properly assessable in this state.

The Lehigh Valley Railroad Company, in the 56th Annual Report of the Board of Directors, to the stockholders, for the

fiscal year ending June 30th, 1910, says, on page 12, under special heading entitled "Floating Equipment":

> "The floating equipment of the company has been thoroughly maintained and increased by the purchase of 17 coal barges and 1 twenty-three-car steel float, which car float was built for use in New York Harbor. Orders have been placed for additional equipment consisting of 2 steel car floats, a steel tug and open lighter and barges."

On page 47, is given a statement of all the equipment of the Lehigh Valley Railroad Company, including locomotives, passenger-train cars, freight-train cars, road service and floating equipment; and, under this last heading, is given all the tugs, steam barges, car floats, etc., operated by the Lehigh Valley Railroad Company or the Lehigh Valley Transportation Company in New Jersey–New York waters; and I suppose that a stockholder would be entitled to believe that this floating equipment was owned by the Lehigh Valley Railroad Company in the same manner as are the locomotives, cars, etc., listed on the same page.

On page 32, of report referred to above, is a statement of "Securities Owned" by the Lehigh Valley Railroad Company, which says that it owns all the stock and all the bonds of the Lehigh Valley Transportation Company; and, in the comparative income account for the years ending June 30th, 1909, and June 30th, 1910, a deficit is shown from the operation of this floating equipment. It seems that the title of the Transportation Company, in this floating equipment is a mere shadow and that, in fact, it is owned and operated by the Lehigh Valley Railroad Company. The Lehigh Valley Railroad Company claims the ownership of this floating equipment in their last annual report to the stockholders of the Lehigh Valley Railroad Company, by giving a list of all the equipment and referring to same as the floating equipment of the Company," *i. e.,* the Lehigh Valley Railroad Company.

The floating equipment operated under the title, "The Lehigh Valley Transportation Company," is under the direct supervision of the officers of the Lehigh Valley Railroad Company. It is documented partly in the Port of Perth Amboy and partly in

the Port of the City of New York, and a considerable portion is not documented at all.

We do not understand that the local assessors of Perth Amboy attempt to assess any of the floating equipment not documented in that port or operated directly from it. We do not know under what circumstances the floating equipment in question was documented partly in the Port of Perth Amboy and partly in the Port of the City of New York; and it would seem to indicate that, at some time, the Lehigh Valley Railroad Company acknowledged the ownership of the floating equipment. The Federal Laws require that all vessels shall be documented or enrolled at the port nearest the domicile of the owner.

It does not appear that the floating equipment operated from Communipaw is assessed or taxed in any state.

The Lehigh Valley Railroad Company object to the assessment of any portion of this floating equipment by the State, although the floating equipment in question is operated under the direction and by the authority of the Lehigh Valley Railroad Company.

Our report includes all floating equipment operated by the officials of the Lehigh Valley Railroad Company as follows:

STATEMENT OF FLOATING EQUIPMENT OPERATED BY THE LEHIGH VALLEY RAILROAD COMPANY. NEW JERSEY—NEW YORK WATERS.

	Port of City of New York.	*Port of Perth Amboy.*	*Not Enrolled.*
Tugs,	11	9	..
Barges, Schooner,	..	15	..
Barges, Sloop,	..	12	..
Barges,.	1	60	41
Steam Lighters,	5	..	..
Derrick,	5	14	15
Grain,	..	10	19
Car Floats,	..	..	26
Cattle Floats,	..	..	5
Steam Hoists,	1	1	3
Pile Derricks, Work Boats, etc.,	..	..	9
	23	121	118
Total			262

TRUE VALUE FLOATING EQUIPMENT.

After thoughtful consideration of all the conditions attendant upon the determination of the true value of the floating equipment of the several railroads, we have concluded that we must ignore the use and occupancy value, and the bargain and sale value, for we cannot segregate this equipment from the other machinery of the railroad system and consider what effect the annihilation of such equipment would have upon the railroad and the multifarious interests it serves. The traveler and shipper are best served by that railroad which delivers him or his goods safely, promptly and quickly to his or its destination. Consequently, he must consider that, for the purpose of carrying passengers and freight, every part of a railroad is of equal value to the passenger or shipper since every part is necessary to the continuity of service which forms an unbroken line for his conveyance from start to finish.

If, perchance, two or more ferry boats, tugs or other important floating equipment were suddenly destroyed and the loss were sufficient to seriously cripple the service, it is likely that the railroad would willingly pay a premium if, by so doing, the equipment could be promptly replaced.

This use and occupancy value should, we think, be considered and appraised, but should not be considered in our determination of "true value" aside from Subdivision IV. We have endeavored to determine the present cost of production for each of the various kinds and types of equipment and, with these figures before us, we have applied a certain depreciation; and we believe that this method gives the "true value," or naked value, as closely as it is reasonable to establish value aside from the elements included in Subdivision IV.

CHAPTER XV.

APPORTIONMENT OF EQUIPMENT TO NEW JERSEY.

ASSIGNMENT OF ROLLING EQUIPMENT.

None of the lines in this State, except the Delaware, Lackawanna and Western Railroad, reports distinct intrastate accounts of earnings, operating expenses, ton miles, train miles, car miles or any of the elements of unit measurement which would enable us to definitely assign the various classes of equipment to the state.

The Delaware, Lackawanna and Western Railroad shows its revenue in the State of New Jersey. The analysis of this road's earnings shows that, while there is but 22 per cent. of its entire line within New Jersey, the operating revenue credited to this state is 30 per cent. of the total earnings. The relation of all tracks of the Delaware, Lackawanna and Western Railroad in this state to the entire line as shown in the annual report to the Railroad Commission, June 30th, 1910, is as 639.03 miles (the total in the state) is 2433.9 miles (the total of all tracks for the entire line), or 26.25 per cent. in New Jersey.

The ratio of earnings on the Delaware, Lackawanna and Western Railroad in the State to the total earnings, *i. e.*, 30 per cent., shows an increase of 27 per cent. over the percentage of track within to the percentage of track without the state. If, therefore, we assign the value of the total equipment of the Delaware, Lackawanna and Western Railroad to this state on the basis of revenue from operation, we will assign *twenty-seven per cent.* more value than if the single-track mileage were used as the basis.

The ratio of all tracks to single line is significant, showing more nearly the capacity to do business; and this increase per cent. over the single line is reflected in the earnings. So far, at least, as the Delaware, Lackawanna and Western Railroad is concerned, it seems proper to assign the value of equipment to the State of New Jersey on a basis of 30 per cent.

NEW JERSEY ROADS LARGER FREIGHTERS.

Group II., of which New Jersey is an influential factor, is the most important freight-carrying group of all, the freight revenue per mile of Group II. being $16,346; Group III. being the next, with $9,678; while other sections of the country fall far below. Group II. is second only to Group I. in passenger earnings per mile.

TRAIN LOADS IN STATE.

The gradients and alignments of the lines within the state generally are more favorable than those without, and, consequently, the train loads are at their maximum within the state.

TRAFFIC DENSE.

The single track in Group II. is 10.3 per cent. of the entire mileage of the country, while the mileage of all tracks in Group II. is 14.6 per cent. of all tracks. Comparing the locomotive mileage with the single-track mileage, per cent., we find that the freight-locomotive mileage in Group II. is 23.3 per cent. of the whole; the passenger-locomotive mileage, 21.8 per cent; the switching mileage, 26 per cent., and the average of all classes of locomotive mileage, 23 per cent. This indicates that traffic in Group II. is denser than in any other group, and, consequently, the percentage of equipment used in the state is larger than the percentage of either the single tracks or the total tracks would indicate.

COMMERCIAL VALUATION.

The Department of Revenue and Labor published a report, in 1905, entitled "Bulletin 21, Commercial Valuation of Railway and Operating Property." This report divides interstate roads into states and places a valuation on all railroad in each state.

COST OF PRODUCTION AS BASIS OF APPORTIONMENT.

The conclusion reached was that the cost of reproduction, in many respects, affords the most satisfactory basis for the solution of the problem of apportioning railway values among states, and that the net-earning basis stands for the solution of the problem of apportioning railway values among states, and that the net-earning basis stands next in favor. It was found impractical to use either of these methods. Neither the time nor the money was available for ascertaining the cost of production. The net earnings, by states, could not be determined with any degree of accuracy. The gross-earning basis for the distribution of values was adopted.

GROSS EARNINGS AS BASIS OF APPORTIONMENT.

This plan is faulty, for the reason that many of our largest railroad systems do not attempt to separate their revenues and operating expenses into states and, where required to report state business to the Railroad Commission, the track-mile basis is generally used. In many cases, recourse was had to all-track mileage, and it seems that, when finally analyzed, the commercial valuation referred to was based on all-track miles.

SINGLE-TRACK MILES AS BASIS OF APPORTIONMENT.

According to the single-track basis of apportioning interstate roads to a state, we assume that the traffic capacity, density of traffic, tonnage, etc., are not affected by the number of parallel lines of track; and, while we are not justified in saying that a double track will necessarily carry twice the business of a single track if properly signaled, its capacity is greater than twice the capacity of single track. Professor Meyers says:

> "Someone has been bold enough to suggest the formula, that the traffic capacity of a railway varies directly with the square of the number of tracks—a second track, for

instance, representing four times the capacity to move traffic; a fourth track, sixteen times the capacity of a single track."

As before stated, we should know the locomotive and car miles, and, in the absence of such mileage, we must use track miles.

NET EARNINGS AND REPRODUCTION.

Net surplus from operation used conjointly with the cost of reproduction of the permanent way and the personal property, exclusive of the land, plus the present value of the land, seems to represent the true value; and if it were possible to separate the earnings and expenses by states, the determination and the apportionment of value would be simplified; as net earnings and reproduction cost supplement each other and, where one fails, the other supplies, each contributing what the other cannot furnish.

BASIS OF APPORTIONMENT OF EQUIPMENT.

We have given careful consideration to the several bases for apportioning interstate railway values to states—such as single-track-mileage basis, all-track mileage, funded and other debts, station population, car mileage, cost of construction, density of traffic, gross earnings, net earnings and cost of reproduction at this time. We believe that the proper basis to adopt, in the absence of information giving car miles an actual intrastate earnings and operating expenses, is the miles of all tracks of each road in the state as related to the miles of all tracks for the entire line.

The States of Michigan, Wisconsin and Minnesota made an apportionment of equipment supposedly on car mileage within and without the State; but, since no such division of car mileage is kept in this State, and must be determined by some empirical rule, it is better to adopt the empirical rule direct.

CHAPTER XVI.

TRACK VALUATIONS.

By Louis Focht, Chief Engineer.

For purposes of determining track valuations the ordinary methods usually adopted for other structures cannot altogether be applied, for the reason that track whenever continued in use must be maintained in such condition that it is fit for the service required. Renewals must therefore be made at such intervals as are necessary to prevent its condition falling below a certain average or standard.

The component parts going to make up a section of track includes the rails, ties, splices, bolts, tie plates, ballast and labor. The renewal of these parts is not made simultaneously, as each has a different life, and the history of each is represented by a series of independent recurring cycles, which together make up the whole and produce an approximately uniform average.

The following table shows the life of the principal track materials under Main Line service within the state as reported by the principal Railroads. The statements are apparently to some extent general estimates and for that reason probably open to some variations. They serve, however, as a guide.

Name of Road.	*Rails, Life.*	*Ties, Life.*	*Stone Ballast.*
Erie R. R., ...	6 years	6 years	10% renewed per year
Lehigh Valley R. R., ...	9 "	10 "	6% " " "
Lackawanna R. R., ...	5 "	7 "	6% " " "
Reading R. R.,.	6 "	8 "	13% " " "
Pennsylvania R. R.,.	8 "	6½ "	9% " " "
Average, ...	6.80 years	7.50 years	8.80% renewed per year

RAILS.

Main Line rails are replaced whenever they become unfit for further service, either from loss by wear and corrosion, from

impairment of the surface, battering of the heads, or other imperfections.

The amount of loss permitted before making renewals varies, frequently it is a trifle less than 3.00% and rises to nearly 10.00%, although in the majority of cases it seldom reaches this latter figure.

On one road, in twenty-four cases, 100 pounds Bessemer rails showed a minimum wear of 2.25% and a maximum of 9.39%, with an average loss of 4.42% at the time of replacement. A record of six extreme cases on another road shows losses from 90 pounds Open Hearth and Nickel Chrome rails, ranging from 7.07% to 13.06%, with an average of 8.82%. In the case where the loss amounted to 13.06% an extreme condition was represented, and these rails were worn to such an extent that they could not be classed as Relayers, but only as Scrap when removed from the track.

Another prominent road classifies rails as "Relayers" when a loss of 8.00% from the original section has taken place.

In computing these estimates the assumption has been made that rails when removed from Main Line service can be classed as Relayers; that the average loss in weight has been 10.00% of the original, and that 10.00% of the rails taken out of Main Line service are fit only to be classed as Scrap, leaving 90.00% fit for Relayers. The first of these is liberal and undoubtedly warranted by the facts. The second had necessarily to be an assumption, as no exact figures are available for use as a guide; however, it is considered to represent a fair average.

While a considerable mileage of track has been laid in the State with special grades of steel, such as Open Hearth, Nickel Chrome, Ferro Titanium, etc., costing from $2.00 to $5.00 per ton more than "Bessemer," these "Steels" have not been considered in the estimates for the reason that they have not been in service a sufficient length of time to demonstrate entirely their efficiency, nor has their use become sufficiently general to warrant classing them with the "Standards."

The price of "New Bessemer Rails" has been taken at $30.00 per gross ton delivered, made up as follows:

Price per ton at mills of new rails,	$28.00	per gross ton
Transportation, say 400 miles @ 4/10c.,	1.60	" " "
Cost of distribution,	.40	" " "
Cost delivered on ground,	$30.00	per gross ton

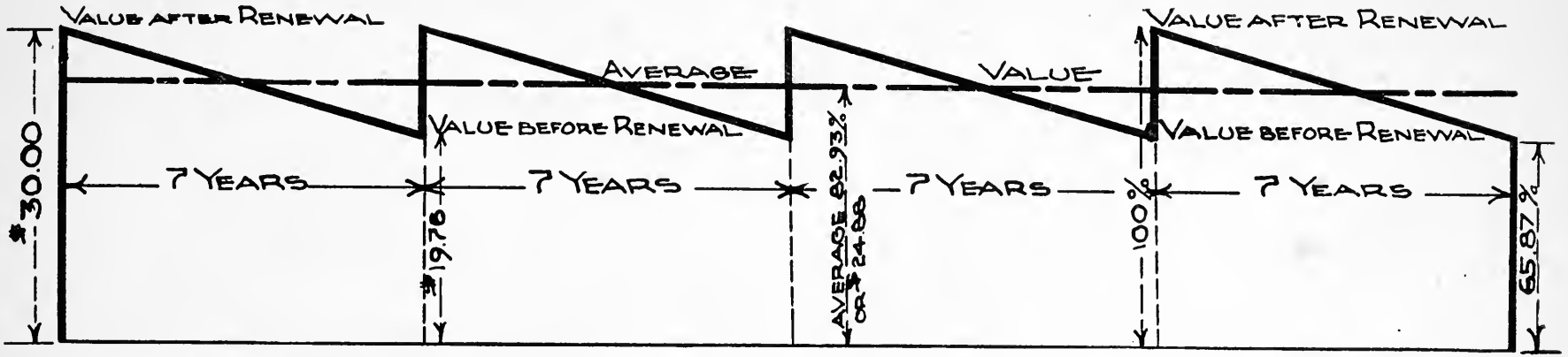
The average market price of Relayers delivered has been taken at $23.00 per gross ton. Considering the loss in weight by wear and corrosion to be 10.00%, and that 10.00% of the Relayers taken out of the track are fit only for Scrap. One ton of *New* rail is therefore equal to 0.90 ton of Relayers and Scrap. If 10.00% of the rails taken out are Scrap, for every original ton put in the track the following value results:

0.09 tons Scrap, @ $15.35,	$1.38
0.81 tons Relayers, @ $23.00,	18.63
	$20.01
Less transportation 50 miles @ 5/10c.,	.25
	$19.76

Therefore the value of each ton of Relayers taken out of the track in terms of the original weight is $19.76.

The value of each ton of rails will therefore periodically fluctuate from $30.00 per ton, immediately after a renewal, to $19.76 immediately before renewal, as shown below by the sketch, and from which it is also seen that the value varies from 100% to 65.87%, the average being 82.93%, or $24.88 per gross ton.

RAIL DIAGRAM



$30.00 VALUE OF RAILS GOING INTO TRACK = 100%
$19.76 " " " TAKEN OUT = 65.87%
$24.83 AVERAGE VALUE OF RAILS IN TRACK = 82.93%

The fluctuations of the values for splices, bolts, spikes and tie plates follow the same general laws as for rails, whereby the average value lies midway between the maximum and minimum values, which are in turn governed by the market prices of new material and Scrap, being therefore entirely independent of life. On the other hand, the values of ties and ballast follow somewhat different laws, in which the life of the material becomes a factor.

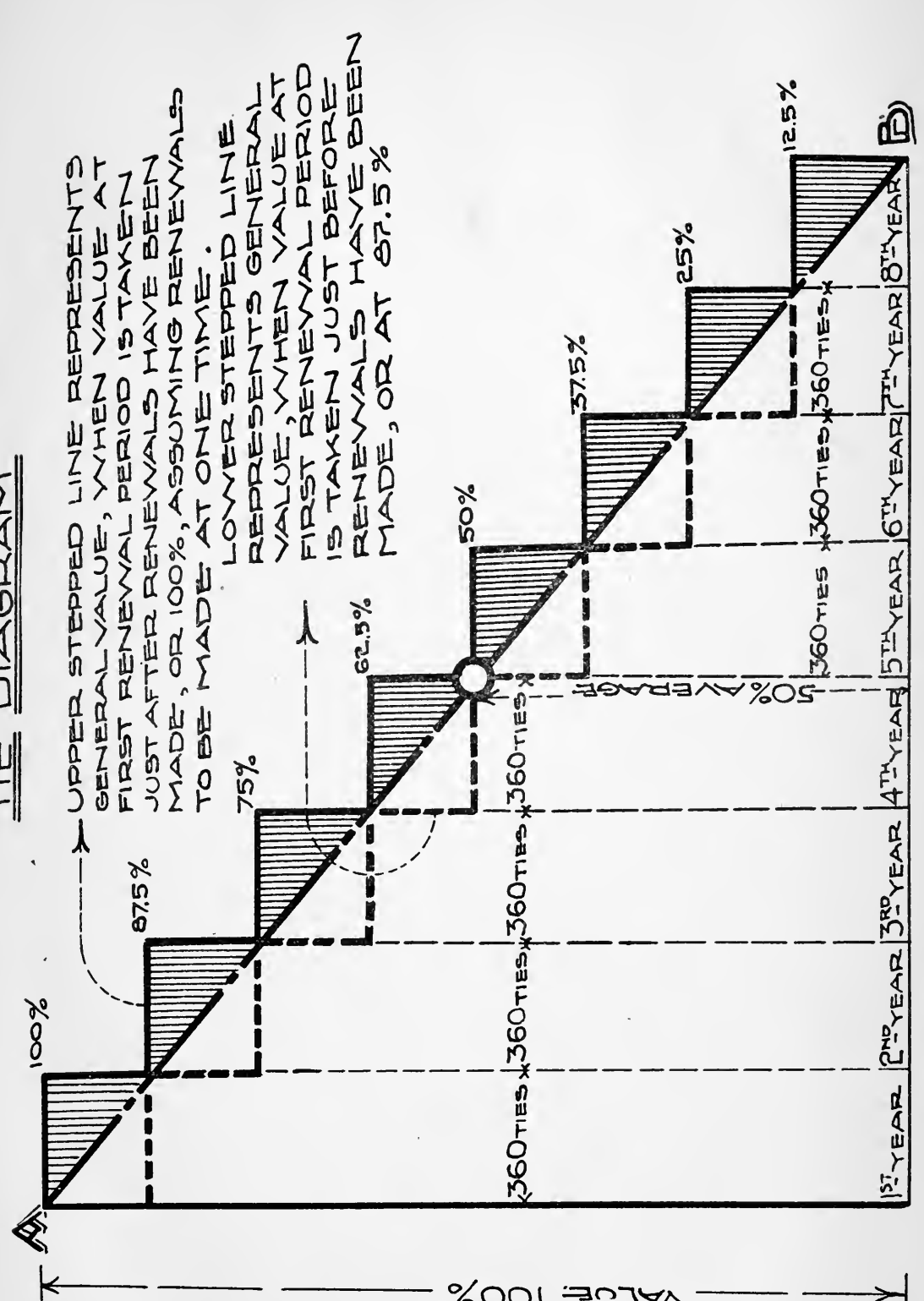
TIES.

According to the reports of the railroad companies, the minimum life of untreated ties is six years and the maximum ten years, with an average of 7.50 years. An average life of eight years has been assumed for the calculations partly for the sake of using even figures, but mainly to be conservative.

With a life of eight years the annual renewals amount to 360 ties per mile (assuming 2,880 ties per mile). The following diagram therefore illustrates in eight groups, or yearly periods, the various stages in the life of a tie. The vertical lines show the value of each group in per cent. of the original value for each of the eight periods.

When the original value is taken immediately after renewals have been made, or beginning with 100% and terminating with 12.50%, a general value of 56.25% is found, being 6.25% above the average.

Should the initial value be taken immediately before renewals have been started, the value for the first yearly period will be 87.50% with a final value of zero, giving a general value of 43.75% or 6.25% below the average.


TIE DIAGRAM
UPPER STEPPED LINE REPRESENTS GENERAL VALUE, WHEN VALUE AT FIRST RENEWAL PERIOD IS TAKEN JUST AFTER RENEWALS HAVE BEEN MADE, OR 100%, ASSUMING RENEWALS TO BE MADE AT ONE TIME.
LOWER STEPPED LINE REPRESENTS GENERAL VALUE, WHEN VALUE AT FIRST RENEWAL PERIOD IS TAKEN JUST BEFORE RENEWALS HAVE BEEN MADE, OR AT 87.5%
100%
87.5%
75%
62.5%
50%
37.5%
25%
12.5%
50% AVERAGE
360 TIES
1ST YEAR
2ND YEAR
3RD YEAR
4TH YEAR
5TH YEAR
6TH YEAR
7TH YEAR
8TH YEAR
VALUE 100%

In the above diagram the renewals have been considered in annual groups of 360 ties and if made at one time the value of the ties in one mile of track will be represented by either of the stepped lines, above or below the line A. B., depending upon whether the initial value at the first period has been assumed after or before renewals are made, or, in other words, whether taken at 100% or 87.50%.

Consequently where the life of ties is assumed to be eight years and the renewals made in annual groups of 360, the value will be either 56.25% or 43.75%, depending upon the time when taken under consideration.

Therefore, if the time be taken immediately after annual renewals the value will be 6.25% above the average; if, on the other hand, it is taken before renewals have been made, the value will be 6.25% below the average.

The result of observations indicates the first value, or 56.25% to represent more nearly the truth, as the usual condition of ties in track is rather above than below 50.0%.

Frequently, however, the renewals continue throughout the entire season, the worst spots being taken care of first and the work continuing at intervals until completed. This condition of affairs tends to increase the number of renewal periods, thus decreasing the width of the steps or renewal periods, and thereby causing the upper and lower stepped lines to more closely approach the average line A. B., the final limit, and virtually coincide with it. The average value in this event will therefore lie between 100% and zero, or at 50.0%.

To be fair, and at the same time have values rather below than above the truth, an average of 50.0%, or the value resulting from this last assumption, has been made, although observation would indicate that the true value is 6.25% higher.

BALLAST.

The percentage of stone ballast annually replaced, as reported by five of the leading roads in this State, ranges from 6.0% to 13.0%, the average being 8.80%.

These percentages do not represent the amount of ballast actually placed in the track each year, but the annual rate of replacement.

To annually replace the amount reported would not generally be feasible and as a rule is not done. The quantity of ballast put in during a year being confined to small isolated spots, the amount is comparatively insignificant.

According to the records of one prominent road, for a section extending over 100 miles of Main Line, 20% of stone ballast was replaced during a period extending from three to five years, or an annual replacement ranging from 6–2/3% to 4%.

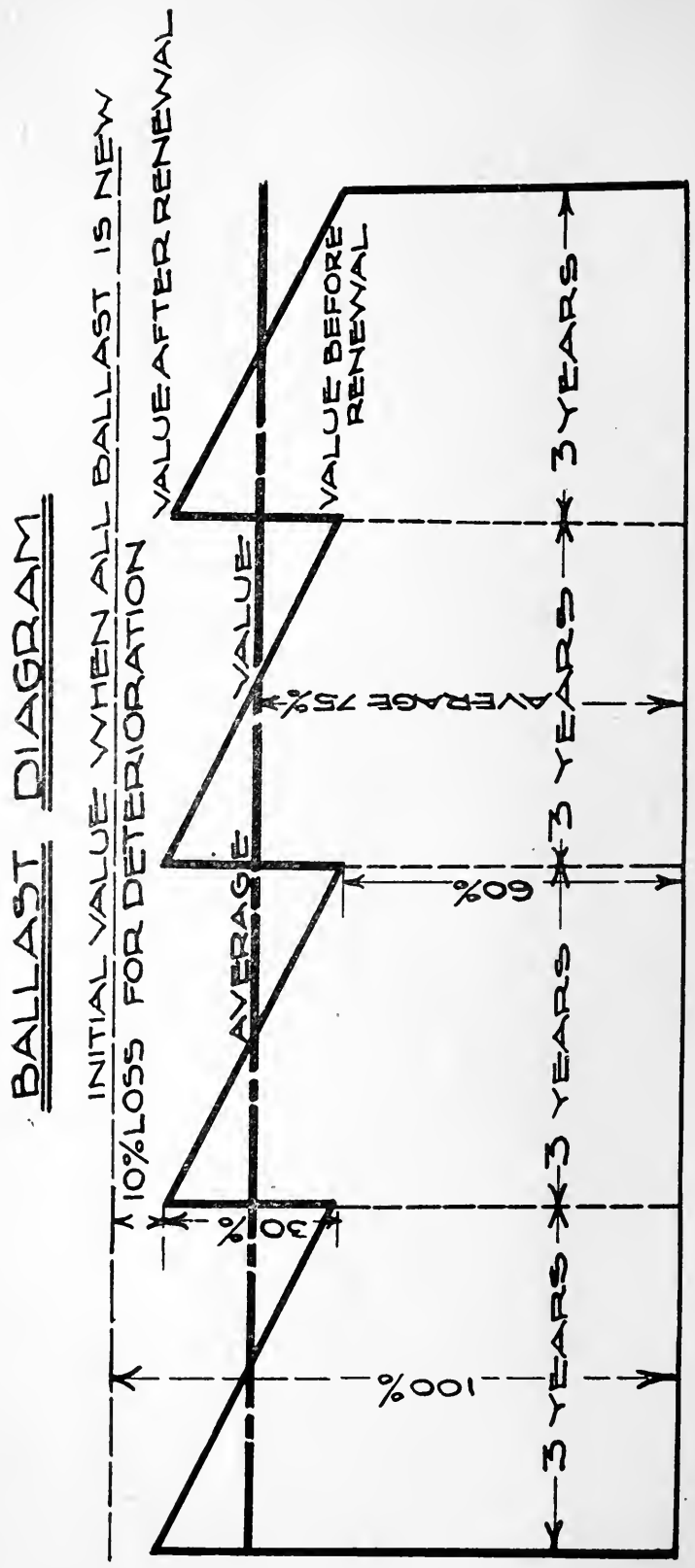
The annual rate of renewal as reported by the railroad companies ranges from 6.0% to 13.0%. If a three-year-renewal period is taken, the amount replaced in this time will vary from 18.0% to 39.0%, or a variation of over 100%. This wide difference can only be accounted for by the variation in the life between ballast made from different kinds of rock, differences in condition of service, etc.

In computing the estimates the renewal period has been fixed at three years and the annual rate of replacement at 10.0%, thus making the amount for each period 30.0%. This assumption is conservative and it is believed will give results rather below than above the truth.

In addition to loss, there is a deterioration in the quality of ballast due to the fact that the lower portions have become mixed with mud through contact with the roadbed from abrasion and other causes.

No statistics are available to show what this amounts to, therefore an assumption had to be made and for these estimates it has been placed at 10%.

The following diagram will perhaps more clearly illustrate in a concrete form these deductions:


BALLAST DIAGRAM
INITIAL VALUE WHEN ALL BALLAST IS NEW
10% LOSS FOR DETERIORATION
VALUE AFTER RENEWAL
VALUE BEFORE RENEWAL
AVERAGE VALUE
AVERAGE 75%
100%
90%
60%
30%
3 YEARS
3 YEARS
3 YEARS
3 YEARS
3 YEARS

The average is accordingly found to be 75% of the "Initial Value."

LABOR.

The original charge of "labor, laying and surfacing," after once entering into the construction of a piece of track, remains there as the invisible element going to make up its cost. So long as the track remains in service and is properly maintained, this element remains with apparently no depreciation. Unlike the rails, ties and other tangible materials entering into the construction, where the changes in condition, due to depreciation, are apparent to the eye, this item continually remains invisible. It is charged but once and still remains as part of the original cost, as all labor charges, after operation has once begun, go into the "Maintenance Account."

Should the track be abandoned, the rails, ties, spikes, etc., each retain a certain market value, and collectively represent whatever commercial value remains. The original labor charge, however, vanishes with the abandonment of the track, and for this reason should remain so long as it is in service.

Whether the charge should continue undiminished may be open to some question, and to a large extent can only be one of opinion.

The claim might be advanced, and with some force, that a portion of this labor at least should vary to a certain extent with the condition of the track materials. This claim being founded on the theory that a purchaser about to consider taking over a railroad property at a time when track renewals are needed, would certainly make a reduction in his estimate of its value to the extent of the necessary outlay required to bring the track to normal condition; and furthermore, while this reduction had been considered in valuing the materials, an allowance should also be made in the labor, particularly in that portion applicable to the laying and handling of rails, because the portion below the level of the rails is seldom touched to any extent at such times, thereby leaving the surface undisturbed and consequently necessitating no expenditure for labor on that portion.

On the other hand, should the contemplated purchase occur at a time immediately after renewals have been made, no deduction should be made as the track is presumably at "Normal Value."

Against this claim, however, will always stand the fact that operations once begun, all future labor charges enter at once into the maintenance account, and should any portion of the original labor charge be depreciated, for whatever cause, it is immediately offset or replaced by a maintenance charge of like kind, and would therefore apparently continue undiminished while the track remains in service.

The question at best is considerably involved, and to offset any argument which might be advanced to the contrary, the assumption has been made in the estimates that the labor for surfacing remains undiminished in value, and that this item amounts to one-half of the total charge for "labor, laying and surfacing," that the other half, or the "labor laying," fluctuates in value between 100% and zero, thus giving an average value of 50% for that portion of the labor applicable to the laying of the rails, and, therefore, an average value on whole of 75% of the total. While no convincing argument can seemingly be advanced for doing this, still, to be conservative, it has been made as a concession and not in the nature of an admission that the premises upon which the argument is founded are correct.

The following tables give the prices of the track materials, scrap, etc., which have been the basis of the estimates. The market prices of the materials are averages covering a five-year period as shown by the diagrams attached, all of which are apparently sufficiently clear to require no further explanation.

TURNOUTS AND CROSSOVERS.

The "Value New" for Turnouts and Crossovers does not represent the gross value, but only the value over and above that of the straight track at the given point. This method has been adopted to avoid the necessity of splitting the straight, or through tracks, into sections where turnouts and crossovers occur,

thus making it possible to estimate the straight, or through tracks, in continuous stretches, regardless of Turnouts or Crossovers, and the Turnouts or Crossovers as single or separate "Plants," so to speak. By the adoption of this method the work of estimating is simplified, complications avoided, and the possibility of duplication and errors largely avoided.

The "Average Values" of the material entering into the construction of Turnouts and Crossovers have been arrived at in a manner similar to that adopted for "Straight Track," that is by averaging the "Value New" with the "Salvage Value."

The fact that but a very small proportion of the Turnout material after being taken out of Main Line service can be utilized in sidings and yards, owing to the difference in design, etc., necessarily regulates the bulk of this material to the scrap pile, after it has outlived its usefulness in Main Track service. Furthermore, in the case of yard tracks, the material is allowed to remain in service until entirely worn out and having a Scrap Value only. For the above reasons, the "Salvage Value" of Turnout and Crossover material has been considered as the "Scrap Value."

"Manganese" or "Manard" Frogs, owing to the fact that they are only used where very light angles are necessary and for this reason as a rule are useless for yard service after having been removed from the Main Tracks, can therefore only be classed as scrap along with the other materials.

Following these assumptions, the "Average Value" of Frogs, Switches, Guard Rails, Switchstands and other accessories, has been found to vary from 59.0 per cent. of the original cost, in the case of Frogs, to 66 per cent. in the case of Guard Rails, but as the Standards in use on different roads vary considerably, the average value considered in making these estimates has been 60.0 per cent. of the original cost.

The values of new Frogs, Switch Points, Guard Rails, etc, used in these estimates, have been based upon the quotations furnished by different manufacturers, and while they are apparently somewhat below the price of some roads, on the other hand they are higher than those for other roads, owing to differences in

design, quality, etc. On the whole, however, those adopted seem to represent a fair average.

"Bessemer Rail" Frogs have been considered in the estimates of all No. 6 and No. 12 Turnouts. Estimates for No. 15 and No. 20 Turnouts have been based on the use of Manganese Frogs; as these latter are used almost exclusively at Interlocking Plants where high speed movement from one track to another is called for, and are, therefore, almost invariably equipped with these Frogs.

The estimates for Turnouts, Crossovers, etc., are based on the use of new rail for 100 lb. and 90 lb. equipment, and on the use of "Relayers" for 80 lb. and 60 lb. equipment, as the use of most of the lighter pattern of switches is confined to yards and sidings where only a small proportion of new rails of these lighter types is now used.

Switch Stands vary in price from $4.50 for Ground Levers to $16.50 for high Automatic Stands. Between these extremes there are a number of styles in use. An average value of $12.00 has been adopted for the estimates as corresponding more nearly to the value of the majority of the Switch Stands in use. No Switch Stands, however, have been considered in the estimates for No. 15 and No. 20 Turnouts, as these Turnouts are almost universally connected with Interlocking Plants.

CROSSINGS.

The cost of "Manganese" Crossing Frogs is about twice that of "Bessemer" Steel. The average value of these frogs is found to be 56 per cent. of the cost. This percentage has been obtained by considering the frogs as worth nothing but scrap value after removal from the track, and as all Crossing Frogs are of special design, suitable only to be used at the particular crossing for which they happen to be designed, the assumption therefore appears justifiable.

The values given in the estimates represent the "Net Value" of the crossing over and above that of the straight track; therefore, in estimating, the Main Tracks can be taken continuously

through the crossing without break, and the crossing value added, thus simplifying the work and reducing the possibility for errors.

The values of Slip Switches are given in the tables at a rate per linear foot. This value includes that of the "Ladder Track," Slips, Frogs, etc., but not the value of the through or parallel tracks.

In making these estimates the aim has been to adapt them as nearly as possible to the various types of track found, and at the same time cover the field with the minimum number of classes. With this end in view, the character of the track construction on all of the principal roads was critically analyzed, with the result that eleven cases were adopted.

For every one of these different classes, separate estimates have been made for each weight of rail, one hundred and seventy-two in all.

Turnouts, Crossovers, Crossing and Slip Switches were investigated in a similar manner, involving the computation of one hundred and twenty-four separate estimates.

While minor imperfections can probably be found in the work, it is believed that the results represent the average values of all classes of track with a sufficient degree of accuracy for all practical purposes.

CHAPTER XVII.

THE CANALS OF NEW JERSEY.

The canals of New Jersey represent an obsolete method of commercial transportation and, since there has been much public debate on the canal subject, we have included, in the body of our report, a general description of the canal properties under the titles, "The Delaware and Raritan Canal Company" and "The Morris Canal and Banking Company."

While neither of these canals as now built and operated is adapted to compete with railroad transportation, the conditions attendant upon the construction, the water supply and the operation of these canals are widely different. The Delaware and Raritan Canal has a general cross section of 80 feet in width at surface of water and 40 feet at bottom, with a depth of 7½ feet. This offers opportunity for traffic of units of at least twice the capacity of the units of the Morris Canal, the cross section of which averages 42 feet at surface and 16 feet at bottom, with a depth of 5½ feet.

The Delaware Canal can be enlarged to at least twice its capacity, within reasonable cost, and there is sufficient water supply to accommodate this additional enlargement.

Operation of the Morris Canal, with its present small capacity, is frequently hampered by lack of water and there is no apparent method of increasing the supply; consequently, there is no possibility of enlarging the capacity of the transportation units. This supply, if used for furnishing potable water, may prove to be of greater value to the people of this State than it could possibly be if used simply to float obsolete canal boats, and waste into the Passaic River.

The Delaware and Raritan Canal Company.

HISTORY.

The Delaware and Raritan Canal Company and the Camden and Amboy Railroad Company were chartered February 4th,

1830, the former to construct a canal to connect the Delaware and Raritan Rivers and the latter to build a railroad from the Delaware River to Raritan Bay. In February, 1831, an act was passed authorizing the consolidation of the capital stocks of these two companies. Thus they were practically consolidated although nominally distinct corporations. Their affairs were managed jointly by the directors of both companies, and they were to share equally in the profits. The main lines of the railroad and canal were completed in 1834 and the branches in 1838. In 1836, the joint companies acquired a controlling interest in the stock of the Philadelphia and Trenton Railroad Company and entered into an agreement with that company for an equal division of their joint profits.

United New Jersey Railroad and Canal Company.

In January, 1867, an agreement was entered into between the united companies and the New Jersey Railroad and Transportation Company, which owned the line between New Brunswick and Jersey City, forming a link in the through New York-Philadelphia route, for a consolidation of interests. Under this agreement, the profits were equally divided among the four companies, viz., the Delaware and Raritan Canal Company, the Camden and Amboy Railroad, the New Jersey Railroad and Transportation Company and the Philadelphia and Trenton Railway Company.

Lease to Pennsylvania Railroad 999 Years.

On June 30th, 1871, the entire property was leased to the Pennsylvania Railroad Company for 999 years, the lessee receiving all assets, assuming all obligations and guaranteeing the united companies an annual rental equal to the 10 per cent. of the aggregate capital stock, and an equal rate of dividends to the Philadelphia and Trenton Railway Company. This lease was confirmed, by a special act of the Legislature, in 1873.

DESCRIPTION.

The canal extends from Bordentown, in Burlington county, northeastwardly through Trenton, passing east of Princeton and west of the main line of the United New Jersey Railroad and Canal Company's main (P. R. R.) tracks to Bound Brook, 36.23 miles; where it turns southeastwardly, following the valley of the Raritan River, to New Brunswick, a total distance of 44 miles. The main feeder leads out of the Delaware River at Ravenrock, 22.85 miles northwest of Trenton, and joins the main canal at Trenton.

The topography of the country traversed is easy and there are no important elevations to overcome. There are thirteen locks, having a total length of 210 feet each; width of clear pass 23 1-3 feet; draught of water allowed, 7 feet.

Rates of Team Towage on the Canal, Payable to the Contractor on the Line of the Canal.

RATES OF TEAM TOWAGE.

"Between Bordentown and New Brunswick, boats not exceeding 150 tons capacity, $7.00 each way, and for cargo six cents per ton additional. Boats exceeding 150 tons capacity, $10.00 each way, and for cargo six cents per ton additional.

"Between Trenton and New Brunswick, boats less than 150 tons capacity, $6.00 each way, and for cargo six cents per ton additional. Boats exceeding 150 tons capacity, $7.00 each way, and for cargo six cents per ton additional.

"Boats exceeding 150 tons capacity, $3.00 each way and 1 cent per ton additional for the cargo.

"Boats of less than 150 tons capacity, $2.50 each way and 1 cent per ton additional for the cargo.

"Between Bordentown and Kingston (or Rocky Hill), boats exceeding 150 tons capacity, $5.00 each way and three cents per ton additional for the cargo.

"Boats of less than 150 tons capacity, $3.50 each way and three cents per ton additional for the cargo.

"These same rates also apply for boats towing between New Brunswick and Kingston (or Rocky Hill).

"Between Trenton and Kingston (or Rocky Hill), boats of more than 150 tons capacity, $3.33 each way and two cents per ton additional for the cargo.

"Boats of less than 150 tons capacity, $2.33 each way and two cents per ton additional for the cargo."

FINANCIAL.

The canal earned $508,507.75 net in 1872, which fell to $36,949.38 in 1891. This dropped suddenly to $970.54, in 1892, and the first deficit was encountered in 1893 and was $14,329.61. This excess of expenses over earnings has continued each year. In 1909, the deficit was $125,993.92. The gross earnings and expenses for the years 1872 to 1909, both inclusive, were $20,074,874.44 and $15,738,584.35, respectively, leaving net earnings of $4,336,290.09. The tonnage has dropped from 2,837,532 tons, in 1872, to 401,231 tons, in 1909, a shrinkage of 86 per cent. The "tons one mile" show a drop from 93,800,450, in 1877, to 7,396,368, in 1909, a decrease of 92 per cent.

GENERAL.

The railroad company does not operate its own boats on the canal, all revenue from operating being derived from tolls.

We are not in position to discuss the causes of decline in the business of the canal or whether its abandonment should be considered; and, since it is so closely interwoven with the railroad property, we are of the opinion that its inventory and appraisal should be made on the basis of a going property.

The income received by the stockholders of the canal company is one-fourth of the 10 per cent. on the capital stock of the united

companies, or practically 56,202, which, capitalized at 5 per cent., produces $1,122,040.

Morris Canal and Banking Company, Lehigh Valley Railroad Company, Lessee.

History and Description.

HISTORY.

The Morris Canal and Banking Company was incorporated by an act approved December 31st, 1824. The purpose of the canal was to connect the waters of the Delaware River at a point near Easton, Pa., with the tidal waters of the Passaic River.

This company had power to make the canal and to take all lands, all streams and other waters necessary for the construction, as well as to operate the canal and to exact tolls and charges.

Section 4 of the charter declares that the canal property used for navigation was to be perpetually exempted from taxation. It was, also, further provided that the canal company was to be clothed with banking powers for a period of thirty-one years. At the end of ninety-nine years from the passage of the act the State had the right to take the canal and its appurtenances, paying a fair value therefor; and, in case the State did not take the canal and its appurtenances at the end of that time, the charter was to be automatically extended for fifty years, after which time it was to lapse and all the property of the canal was to become the sole property of the State.

Construction did not commence until 1827 and the first canal, which was of smaller cross-section than the present canal, was completed in 1831. On January 26th, 1828, the canal company was authorized to extend the canal to the Hudson River. This extension was completed in 1836. The canal company was organized in 1849. At the time of the reorganization 10,250 common shares and 11,750 preferred shares were issued, all at One Hundred Dollars par value.

In 1871 the canal was leased to the Lehigh Valley Railroad Company, a corporation of Pennsylvania, in perpetuity, and it is now being operated by that company.

LOCATION.

The property of the Morris Canal and Banking Company extends from Jersey City, in Hudson county, to Phillipsburg, in Warren county, about 102 miles. The total miles of canal feeders number 106.69; feeders, 4.69. The canal passes through Newark, Paterson, Dover and Port Morris, to Phillipsburg.

CAPACITY.

The utmost capacity of the canal, when there is abundant water, is about 1,000,000 tons per annum each way.

ENGINEERING FEATURES.

As an engineering work the canal presents many interesting features. The difference in level between mean-tide level and the summit at Port Morris is 914 feet. This elevation is overcome by means of 16 lift locks and 12 inclined planes between the Passaic River and Hopatcong.

LONGEST LEVEL.

The longest level, 17½ miles, extends from a point in Essex County near Bloomfield, 18.5 miles from the Hudson River, to a point west of the Pompton River near Pompton, 36 miles from the Hudson River. The greatest rise by incline is at Montville, 41.73 miles from the east end. At this point are found two planes, one 74 feet and the other 76 feet rise, with a short stretch of canal (not exceeding 350 feet) between.

The longest level on the east side of the summit is from a point in Sussex county 70.69 miles from the Hudson River and 17.7 miles from the summit of Port Morris. This level is 11.77 miles long. The difference in elevation between Port Morris and the Delaware River is 760 feet, which is overcome by a flight of eleven inclined planes and seven lift locks.

DIMENSIONS.

The original dimensions of the canal provided for a width on bottom of 20 feet; depth of water, 4 feet; width at surface of water, 32 feet. The locks had chambers 9 feet wide and 75 feet long between the mitre sills. The inclined planes correspond with the locks. There were originally constructed 20 planes and 3 locks.

ORIGINAL BOATS EIGHTEEN TONS.

The gross tonnage of the first boats was 18 tons each, or less than the smallest coal car now in general operation in the state.

CHANGE IN DIMENSIONS.

In 1835-6 all the summit planes were altered to locks. The planes were widened 2 feet and the locks enlarged 11 feet (width) and 95 feet (length) in 1841.

After the organization of the new company, in 1845, the enlargement of the canal section was commenced. This larger section provided for a bottom width of 25 feet, a depth of 5 feet and a width on water line of 40 feet.

SECTION BOATS FORTY-FOUR GROSS TONS.

In 1845 section canal boats of 44 tons gross were introduced and, in 1860, the boats were increased in size to carry 70 gross tons, which is the greatest capacity used up to the present time.

PUBLIC HIGHWAY.

The canal is a public highway, and the lessees of the canal claim that their policy has been to encourage canal boat owners to use the canal. There seems to be no disposition on the part of the public to use this canal, as all privately-owned canal boats have disappeared long since.

FREE FROM TAXES BY CHARTER.

By the charter of 1824 the company's property used for canal navigation purposes was to be forever free from State, county and municipal taxes, this exemption being recognized in the supplement of 1867, enacted after the foreclosure sale of the property.

TAXES PAID.

After the passage of the Railroad Tax Law in 1884, providing that all property used for railroad and canal purposes should be assessed by the State Board of Assessors, that board assessed the property of the canal company. The company protested and, after extended litigation, it paid the sum of $150,000, under protest, to cover the years 1884 to 1889, inclusive. The amount of the annual taxes paid under protest has increased gradually to $61,167.43, paid in 1909.

The general tax act was revised and re-enacted in 1888, offering, on behalf of the State, to surrender the right to take the company's property providing the company would, on its part, surrender its exemption from taxation.

RIGHT TO ABANDON.

During this same year (1888) an act was passed for the benefit of the company, authorizing it to abandon its franchise of operation and cease to operate its canal at any time within the five years thereafter.

Evidently the proprietors did not find it desirable to avail themselves of the privilege of surrendering their rights at that time.

LAND TITLES.

The titles in the lands held by the canal company are of four kinds, namely:

Title by deed in fee-simple absolute.
Title as long as used for a canal.
Title by condemnation for canal purposes.
Title by gift, occupation or adverse user.
The total length of canal and feeders is 106.69 miles.

Lands	of	the	First	class	covered	12.4	per	cent.
"	"	"	Second	"	"	21.5	"	"
"	"	"	Third	"	"	58.8	"	"
"	"	"	Fourth	"	"	7.3	"	"
						100.0	per	cent.

LAND TO REVERT.

The title to the land in the second class would appear to revert to the original owner upon the vacation of the canals. "Titles of the third class, being those acquired by condemnation, will also revert unless the Legislature authorizes a change of the public use to which they may be devoted, in which case they could be used for the changed public use, subject to the making of additional compensation wherever additional burdens or damages were thrown upon the owner of the soil." Titles of the fourth class would be fee-simple titles wherever the adverse user of gift was properly established.

The land covered by the reservoir properties of the Morris Canal and Banking Company are considerable, as shown in the following table:

*Greenwood Lake,	787.00	acres
Lake Hopatcong,	460.86	"
Stanhope Reservoir,	351.35	"
Cranberry Lake,	300.00	"
Bear Swamp,	89.14	"
Green Pond,	10.01	"
	1,998.36	acres
Less part of Greenwood Lake in New York,	119.00	"
Land covered by reservoirs, New Jersey,	1,879.36	acres

*_Note._—The total flowage area of Greenwood Lake is 787, of which 119 acres are in New York State. We are informed that the title of a considerable portion of Greenwood Lake may be questionable.

COST OF CANAL.

The cost of constructing the canal, including enlargements, as shown on the profile computed and drawn under the direction of William Talcott, Engineer and Superintendent, in 1861, is as follows:

SUMMARY OF COST OF THE MORRIS CANAL.

From Delaware River to Newark,		$2,000,000
Alterations of planes in 1835-6,	230,000	
Extension to Jersey City, 1836,	600,000	
Greenwood Reservoir and Feeder,	170,000	
Enlargement of planes and locks, 1841,	400,000	
		$3,400,000
Enlarging canals and rebuilding planes,		1,700,000
Total cost of canal,		$5,100,000

DECLINE OF TRAFFIC.

The available data on tonnage dates from 1845, when the total traffic carried for the entire year was 58,259 tons. The business of the canal reached its maximum in 1866, when 889,220 tons were carried and $275,970 were earned over expenses and taxes.

After the canal was leased to the Lehigh Valley Railroad, in 1871, the tonnage dropped to 629,044 tons, the gross earnings being $283,725.34; the expenses and taxes, $371,021.81; the interest, $88,960.86; and the deficit, $176,257.33.

From 1871, the traffic gradually dwindled to 27,392 tons, in 1902, or less than one-half the tonnage of 1845, carried at a much less rate per ton. There has been a slight increase in tonnage since 1902, the tonnage in 1910 being 55,328.

The decrease in tonnage between 1845 and 1902 was 53 per cent. The decline from the maximum in 1866 was 97 per cent, while the income decreased over 90 per cent.

The lease to the Lehigh Valley Railroad, while being greatly to the benefit of the holders of the securities of the canal company, proved a great loss to the Lehigh Valley Railroad Com-

pany. According to the report of the commissioners appointed under concurrent resolutions of March 31st, 1903, "The property as a canal has become and for several years has been unprofitable."

"An examination of the annual earnings of the canal company, submitted by the lessee heretofore set out, appears to show conclusively that the canal has no value for canal purposes, either to the Lehigh Valley Railroad Company or to the State. There appears to be no way in which the State could make the canal profitably available for water transportation."

LOSS IN OPERATION.

The Lehigh Valley Railroad Company, under the lease in perpetuity, dating from May 4th, 1871, undertakes to pay interest at the rate of 4 per cent. per annum on the common stock, of which $1,025,000 face value is outstanding; also, 10 per cent. on $1,700,000 of preferred stock, together with interest on the funded debt, the total of which now stands at $188,500 per year.

According to the statements of the Lehigh Valley Railroad Company, the first year's operation resulted in a net loss of $176,257.33, including the dividends and interest; and, from that date to this, covering a period of 39 years, the deficit from operation, dividends and interest (interest at 4 per cent.) amounts to $10,873,578, or more than five times the cost of the original canal, and more than twice the cost of the original construction and the enlargements.

The lease of this canal property is in perpetuity. There are no prospective earnings that will likely change the present annual deficit into a profit—or even lower the deficit—and, indeed, it is not unlikely that the deficit will continue to increase; and, even though the canal were abandoned and the loss from operation had ceased, the dividends and the interest would still have to be paid.

If we attempt to apply true value as defined by the court to the canal as a whole, we face a unique condition, where there is no willing buyer of the whole property at any price; and the lessee

is desirous of surrendering the property, though required to still continue, in perpetuity, the yearly payment of the sum of $188,500 in satisfaction of the terms of the lease.

What, then, is the "true value" of a property of this character, when the cost of retaining it puts an annual burden of some $91.000 upon the operating company, of which sum, $61,167.43 is paid to the State in taxes? Suggestions have been made for the possible use of portions of the canal. One plan contemplates the utilization of 17½ miles level for a freight railroad. This plan seems impracticable on account of impossible alignment. The Erie Railroad covers only 11½ miles reaching the same points.

1903 REPORT OF COMMISSIONERS.

A report of Commissioners George T. Werts, John W. Griggs and Foster M. Voorhees, dated March 31st, 1903, sets forth fully and clearly the history and conditions attendant upon the construction, enlargement and results of operation of the canal property.

The commission concludes its report as follows:

> "AND WHEREAS, by authority of a concurrent resolution of the Senate and General Assembly, passed March 31st, 1903, the Governor appointed George T. Werts, John W. Griggs and Foster M. Voorhees, a commission, to inquire into the matter, who have reported to the Legislature that the canal ought to be abandoned upon the terms hereinafter stated and enacted, and the charter repealed."

No legislative action has followed the commendation of this committee. It is generally understood that the lessee is desirous of being released from the duty of maintaining and operating the canal property and is willing to abandon all the canal property to the State along the lines suggested by the commission.

It seems proper to suggest that, in case legislation is considered looking to the abandonment of the canal, the following additional duties should be required from the lessee, namely:

SUGGESTED REQUIREMENTS.

All highway or foot bridges crossing the canal, which the canal company is now required to maintain and renew, shall be replaced by a permanent way or road across the canal in accordance with the requirements of each particular case determined by agreements entered into by the various boroughs, townships or counties and the lessee, and approved by the commission, all to be done at the expense of the lessee.

All structures, buildings or constructions of any kind, and machinery, which should be maintained or removed in order to protect the public health, comfort or convenience, shall be maintained or removed under the instruction of the commission; and, in case of the failure of the lessee to comply with the instructions of the commission in the manner and time set forth in the order of the commission, then the commission shall proceed to cause such work to be performed and shall make such necessary arrangements for the maintenance of any work which, in their judgment, requires to be maintained; and the lessee will be required to pay all costs incurred by the commission in the carrying out of such work.

EXPENSES TO BE PAID BY LESSEE.

All expenses attendant upon the payment of the commissioners, together with all other expenses incurred by the commission or the State in carrying out any legislative enactment authorizing the abandonment of the canal, shall be paid by the lessee; and the sum of Fifty Thousand Dollars shall be deposited by the lessee to guarantee the initial expenses; and, if additional money is required to carry out the work set forth in the legislative enactment, then such additional sums must be paid by the lessee.

In order that the State may be fully protected, it would seem desirable that the lessee furnish a bond in an amount sufficient to cover any expenses necessary for the carrying out of the enactment.

It does not seem unreasonable to require that the Lehigh Valley Railroad Company should stand the expense of being released from the burden which is now a drain on the treasury, and it is not likely that all expenses attendant upon the work of the commission would equal the loss now incurred in one year's operation of the canal.

CHAPTER XVIII.

METHOD OF CONDUCTING APPRAISAL.

SCOPE OF SURVEY AND INVENTORY.

In order to fully comply with the state tax laws and the special enactments under which this work was authorized, it was deemed necessary to *measure every foot* of railroad property in the state. This has been accomplished. All tracks, embankments, excavations, structures, culverts, water stations, coaling stations, buildings and bridges of every kind; all signaling, interlocking, machinery, fixtures, materials and supplies have been actually inventoried by our own force, acting under detailed instructions.

WORKING FORCE.

The maximum force during the summer months reached a total of ninety, as follows:

1 Expert in Charge.
1 Chief Engineer.
1 Chief Clerk.
1 Office Engineer.
1 Machinery Expert.
1 Signal Expert.
1 Special Assistant Engineer.
1 Office Assistant Engineer.
9 Assistant Engineers in Charge of Field Parties.
1 Confidential Examiner.
1 Confidential Statistician.
7 Stenographers.
3 Draughtsmen.
6 Computers.
46 Chainmen.
9 Field Assistant Engineers.

COMPUTERS.

After the field work was completed, the assistant engineers and the field assistants were brought into the office, together with a number of the most experienced chainmen. This force was used

in making the computations of the quantities surveyed by the respective field parties and in assisting to close up the work in general.

NO PROFILES AVAILABLE.

The railroads of this state were not constructed by the companies under whose titles they are now operated. They were poorly constructed originally and few records are available. No profiles are available and, in many cases, *no land maps are extant.*

LAND MAPS.

The Delaware, Lackawanna and Western Railroad, one of the most important corporations doing business in the state, has no continuous land map. The Pennsylvania Railroad, the Lehigh Valley Railroad and the Central Railroad of New Jersey are well equipped with land maps, and we have secured a complete set of these.

INSTRUCTIONS TO EMPLOYEES.

The plan of conducting the field work is fully set forth in the "Rules and Instructions for the Guidance of all Employees in the Revaluation of Railroads and Canals," copy of which is found in the appendix.

PROGRESS REPORTS.

A monthly record was made of the work of each field party, their work carefully analyzed, plotted and diagramed. Each assistant engineer was furnished with a diagram of the entire work of all the field parties in order that all concerned might be fully informed as to the work of each.

The party earning the premium for the month was indicated by a star (see "Instructions"). This method of showing every man in the field exactly what the others were accomplishing resulted in keen competition.

The output per man, per day, in miles of work covered, increased as follows:

INCREASED EFFICIENCY OF FIELD FORCES.

Month.	*Miles.*	*Per Cent. Increase Over May.*
May,	0.128	
June,	0.143	11.8
July,	0.244	90.0
August,	0.350	173.0
September,	0.377	195.0
October,	0.389	204.0

From June on to the end of the field work, every man extended his efforts to the utmost, and he knew what to do and how to do it.

FORMS FOR TABULATION.

The following is a list of forms used in the work:

1. Letter head, large.
2. Letter head, small.
3. Envelope, small, white.
4. Envelope, large, white.
4-A. Envelope, large, manilla.
4-B. Envelope, large, manilla, return.
7. Voucher.
8. Voucher, register.
9. Pay roll.
10. Post card.
10-A. Report card.
11. Expense voucher.
12. Receipt book.
13. Final summary sheet.
20. Land, main stem, first-class.
20-A. Supplement to Form 20.
21. Land, second-class.
21-A. Supplement to Form 21.
26. Memorandum of assessed valuation of land adjoining main stem.
26-A. Supplement to Form 26.
30. Detail and computation sheet.
30-A. Supplement to Form 30.
31-1. Assembling Sheet, land.
31-2. Assembling Sheet, clearing and grubbing.

31-3. Assembling Sheet, graduation.
31-4. Assembling Sheet, bridges, retaining walls and culverts.
31-5. Assembling Sheet, track and its appurtenances.
31-6. Assembling Sheet, fencing.
31-7. Assembling Sheet, telegraph and telephones.
31-8. Assembling Sheet.
32. Distribution sheet.
33. Graduation on main stem.
36. Grading calculations.
37. Length of main stem in taxing districts.
38. Graduation summary.
39. Detailed estimated value of; general form.
40. Main stem track classification.
40-A. Supplement to Form 40.
41. Summary estimate of track on main stem.
42. Summary and estimate of track outside of main stem, second-class.
80. Floating equipment.
90. Locomotives.
90-A. Supplement to Form 90.
91. Miscellaneous road equipment.
91-A. Supplement to Form 91.
92. Passenger equipment.
92-A. Supplement to Form 92.
93. Freight-train cars.
93-A. Supplement to Form 93.
94. Statistics—Memorandum concerning train equipment.
100. Eight sheets, manual interlocking.
100-A. Supplement to Form 100.
101. Two sheets, miscellaneous signals, crossing gates and alarms, etc.
102. Three sheets, electric interlocking.
103. Two sheets, automatic signals.
104. Three sheets, pneumatic interlocking.
120. Docks and piers.
130. Shop machinery and machine tools.
130-A. Supplement to Form 130.
132. Shop fittings, shafting, belting, etc.
133. Supplement to Form 132.
140. Materials and supplies.
140-A. Supplement to Form 140.

The necessary forms were furnished for all of the railway corporations in the state. The information called for on the forms was generally supplied, where the records of the company were kept in such manner as to permit of the information being compiled; but, in many cases, no data could be had from the railroads. This information was compared with the data secured by our field forces and experts.

MACHINERY, TOOLS, &C.

An inventory was made of all machinery, machine tools, shafting, belting, fixtures, etc., by a machinery expert who has had years of experience in the selling and buying of machinery, especially such as is in general use by the railroads. The prices and the depreciation were determined on each machine after consultation and instruction. Correspondence was entered into with various makers of machinery, and all important plants were made the subject of special examination.

SIGNALING AND INTERLOCKING.

Plans of the various interlocking plants, and block signaling, have been secured and every installation in the state has been surveyed by a signal engineer who, through years of experience, is thoroughly acquainted with cost of installation.

The record of every interlocking plant has been prepared and tabulated for the first time in this state. (See Appendix.)

ATTITUDE OF THE RAILWAY OFFICIALS.

The railway officials signified their willingness to co-operate with this Office in the furtherance of the work and, as a first step, issued bulletins to officers and employees. The following is the form used by the several railroad systems in the state:

PENNSYLVANIA RAILROAD COMPANY,
(NEW JERSEY DIVISION.)
WEST JERSEY AND SEASHORE RAILROAD COMPANY.
CIRCULAR.

To Officers and Employees:

The revaluation of railroads and canals of the State of New Jersey authorized by the Legislature will be conducted under the direction of Mr. Charles Hansel, as expert in charge, and a corps of assistants who will have cards of identification of the following form, signed by Mr. Charles Hansel:

RAILROAD AND CANAL REVALUATION, N. J.,
55 BROAD STREET, ELIZABETH, N. J.

To Whom it May Concern:

Mr. .....

is an employee of the State of New Jersey, and is authorized to enter the property of any railroad, railway or canal at all reasonable hours, for the purpose of examining, inspecting and appraising same.

By order of

CHARLES HANSEL,
Expert in Charge.

No.....

All officers and employees are hereby directed to permit inspectors, when provided with such cards duly signed by Mr. Hansel, to go upon the property of this company at all reasonable hours for the purpose of this revaluation work, and should extend all reasonable facilities to the inspector in charge.

In order to avoid duplication, confusion and misunderstanding the company has arranged with Mr. Charles Hansel, expert in charge for the State, that all information required by him or his assistants shall be furnished through Mr. Benjamin W. Carskaddon, real estate agent.

W. HEYWARD MYERS,
General Manager.

Office of the General Manager, Broad Street Station, Philadelphia, Pa., June 1st, 1910.

IDENTIFICATION CARDS.

Each of our employees was furnished with an identification card, the same as shown in the railroad bulletin, and these cards were honored at all times by the railroad officials and their employees.

TAX DEPARTMENT IN CHARGE.

It was the desire of the railroad officials of the large systems that all correspondence and all matters concerning this work should be carried out through the official in charge of the tax departments, excepting in the case of the Central Railroad of New Jersey, of which company the legal department was in charge.

This was agreed to by this Office, with the understanding that the information desired would be furnished.

In all cases, the officials representing the railroad companies have been courteous and apparently desirous of furnishing the information requested. Much of the data had to be prepared and the work done concurrently with the regular work and, since the tax agent was dependent upon the heads of the various departments, the work was impeded by this method of carrying all the work through one channel. In many cases, information was not furnished on the ground that the scope of our work did not cover the information called for, and, while we have not received the broad co-operation of the railway officials, much data has been received in the shape of plans, right-of-way maps and general information, and many questions have been answered.

The largeness of the work involved so many questions and theories that it was impossible to secure the best results without a free discussion with the head of each department of all matters pertaining to that department. This opportunity was denied us, and all efforts on our part to gain information direct from the heads of the departments failed. We do not mention this by way of complaint, but rather to set forth the facts.

We believe that the work would have been carried out with less delay and trouble to all concerned had the presidents of the different companies issued instructions to each head of each department to take up the matters of the respective departments directly with this office.

PLANS FURNISHED BY RAILROADS.

By complying with the wishes of the railroads in respect to the channel through which we conducted our inquiries, we were enabled to secure a vast number of plans which they were not required by law to furnish. These plans materially aided the progress of our work, and they will form a permanent record in the archives of the state.

UNIT PRICES.

The first requisite of determining the value of the physical elements of a property is the unit price to be applied to quantity.

During the progress of the field work a force of engineers and computers was engaged in computing and gathering data from all sources. A unit price was determined for each of the several thousands of items entering into the construction of a railroad. This mass of data has been bound and is made a part of this report by reference.

SOLIDIFICATION OF ROADBED.

The solidification of roadbed, by reason of settlement through age and use, has not been taken as an element of value for the purpose of this report. It is manifest that a given piece of roadbed which has stood under traffic and the elements has been moulded to a more solid mass than the original construction could produce, and this solidification has added a considerable value, which could only be acquired by the lapse of time.

In the construction of an embankment the engineer requires the contractor to use every reasonable means of tamping and solidifying, so as to secure as stable a roadbed as possible, and any failure to do this is reflected in the increased expense of maintenance, due to settlement, the disappearance of ballast, etc.

In addition to this element of solidification, the quantities which would be found in an embankment of considerable elevation would not indicate the actual quantities placed there during construction, for the reason that, in many cases, fully ten per cent. of the total area showing above the surface has settled below the natural surface by pressure of the mass, and, in cases where the natural ground is unstable, a much larger amount of material has disappeared.

This solidification and settlement of roadbed has been an element of cost and must be provided for. The railroad company is entitled to claim this cost as a part of their investment. We have no means of determining the amount of solidification or settlement, even approximately, and have not, therefore, attempted to fix any definite unit of values for same.

CHAPTER XIX.

TAXES.

TAXES PAID IN EACH OF THE SEVERAL STATES

A study of the taxes paid by railroads in each of the several States reveals the fact that the amount of taxes paid per mile in New Jersey, in 1909, is the highest paid in any state, and is 20 per cent. higher than the next highest state (Connecticut). Comparisons have been made for the period of four years covered by the years 1906 to 1909, both inclusive. The report of 1909 is the latest of the Interstate Commerce Commission. The complete tabulated comparison is given in the appendix.

The following, brief analysis of the order in which the States stand in regard to the amount of taxes paid per mile, is illustrative:

1.	States	receiving	taxes	over	$2,100	a	mile	and	under $2,150, ...	1
2.	"	"	"	"	1,650	"	"	"	1,700, ...	1
3.	"	"	"	"	1,450	"	"	"	1,500, ...	1
4.	"	"	"	"	1,200	"	"	"	1,250, ...	1
5.	"	"	"	"	1,000	"	"	"	1,050, ...	1
6.	"	"	"	"	750	"	"	"	800, ...	1
7.	"	"	"	"	700	"	"	"	750, ...	1
8.	"	"	"	"	550	"	"	"	600, ...	2
9.	"	"	"	"	500	"	"	"	550, ...	2
10.	"	"	"	"	450	"	"	"	500, ...	4
11.	"	"	"	"	400	"	"	"	450, ...	5
12.	"	"	"	"	350	"	"	"	400, ...	4
13.	"	"	"	"	300	"	"	"	350, ...	5
14.	"	"	"	"	250	"	"	"	300, ...	6
15.	"	"	"	"	200	"	"	"	250, ...	7
16.	"	"	"	"	150	"	"	"	200, ...	7

In 1905, New Jersey received $789.00 per mile; in 1906, $848.00; in 1907, $2,047.00 per mile, an increase of 157 per cent. Taxes for 1908 fell off $121.00 per mile and, in 1909, increased to $2,166.00 per mile.

It will be observed that, after the fourth state in order (Rhode Island), the rate of taxes per mile drops very rapidly until Arizona is reached. This difference in rate of taxes per mile lies largely in the difference in method of assessment, due to the vagaries of railroad taxation.

DENSITY OF POPULATION.

New York and New Jersey stand upon practically the same basis as to density of population compared with mileage. New York has 10.18 miles and New Jersey has 10.57 miles of railroad, for each 10,000 inhabitants. If we excluded the city of New York, the ratio of density of population to miles of railroad would be greater in New Jersey than in New York. Rhode Island has but 4.31 miles of railroad for each 10,000 people.

The large difference in the amount of taxes paid per mile by the railroads of New Jersey and New York must lie in the different methods of assessment of value. The average value per mile of single track in New York as given by the Department of Commerce and Labor, Bulletin 21, 1904, is $108,300. This same report shows value of New Jersey railroads per mile of single track to be $146,400, or 35 per cent. more valuable than the railroads of New York, and greater than the railroads of any other state.

LOCAL ASSESSMENTS.

We are not in position to know positively whether or not the property of the railroads of this state is more accurately assessed than the property of other corporations or of private persons.

LAWS OF VARIOUS STATES.

A study of the railway tax laws of the various states demonstrates the wide difference in principles and results, and illustrates the great difficulty of writing a statute which is comprehensive in all its details; and, perhaps, the vagaries of the tax laws are

occasioned by the difficulty of arriving at a proper method of determining value, having in mind the various "true values" of the railway and the apportionment of value into states and minor civil divisions. It is, however, very difficult to formulate the remedy; and, although railway officials, generally, have reason to complain of the diverse theories of taxation adopted in the several states, it does not appear that they are prepared to offer a complete plan which would be fairly just to all concerned and which they would willingly see incorporated in the statutes of all the states.

SPECIAL ENACTMENTS.

The primitive systems employed in earlier years have given way to special enactments. Taxation based on gross earnings or on gross receipts has been, generally, superseded by ad valorem or some form of specific taxation. In thirty-two states, and in the District of Columbia, we find a general property tax based on the value of real and personal property; and, with some qualifications, several other states might be included. Indeed, all the states have some form of ad valorem or specific taxation. It appears, therefore, that the trend of change is toward ad valorem or property value; and this, of course, involves the valuation of the physical property; and, perhaps, in addition thereto, the elements sometimes termed the non-physical, adventitious, intangible, franchise or unearned increment elements.

GLOSSARY OF TERMS.

Any system of inventorying and appraising the physical property, as well as the purpose of the valuation, must be clearly defined; and, in order to avoid confusion and misinterpretation, it is necessary to prepare a glossary of terms and arbitrary definitions of words as applied to the particular scheme or law of valuation, as well as a standard of measurement, or template, to be applied to each of the various, important classes of property involved in a railway.

UNIFORM TAXATION.

There must be some method of railway taxation which is reasonably correct and understandable. It is not likely, however, that satisfactory progress will be made toward uniformity or practicability unless the matter is made the particular business of railways, working in conjunction with representatives of the several states.

The State legislators seeking to enact a bill for the taxation of railroads are not in a position to try out their theories by actual application. They are in a position similar to that of a person attempting to do the work of an engineer or an architect who is called upon to draw plans and specifications and to determine costs without knowing the characteristics or the physical and elemental value of the various materials and members he is required to employ. Consequently, the legislators, be they ever so well qualified in mind and integrity of purpose, must of necessity fail to draft a bill based on a comprehensive understanding of its meanings and the result to be obtained through its enforcement.

TERMINOLOGY.

The scope and meaning of the words "true value" and "franchise value" are illusive and fugitive. The definitions of these terms change with their application and can only become fixed and understandable when they are nailed fast in the detailed specifications of some particular law. Then, so far as that law is concerned, their meaning and scope are defined, limited and fixed.

CHAPTER XX.

CONCLUSION.

The results of the work which is now concluded can be expressed in one line of figures, as below:

	Main Stem.	*Subdivision IV.*	*Personal.*	*Second Class.*	*Total.*
Valuation 1911, ...	$132,066,295	$76,930,918	$76,095,048	$89,668,164	$374,760,425
Assessment 1910, ..	130,149,210	51,605,400	31,207,385	73,584,458	286,546,453
Increase, ...	$1,917,085	$25,325,518	$44,887,663	$16,083,706	$88,213,972

While the above figures are significant, they do not illustrate, in any way, the mass of data from which they were compiled.

The State Board of Assessors has been furnished with thirty-two bound volumes of typewritten matter, of some hundreds of pages each, setting forth, in detail, the description and value of each element of land and structures; and, in addition to these thirty-two bound volumes, a complete, typewritten list of rolling and floating equipment, and machinery, for each railroad, has been furnished; so that the state is now, for the first time, in possession of knowledge concerning each of the multifarious items which go to make up the grand total of millions.

We have made an inventory of materials and supplies for maintenance of track, but have recommended that it be not included in the taxable value, for the reason that the unit price for track valuation requires a constant condition. The argument for track valuation is fully set forth under the subject "Track."

While it has required an immense amount of labor and systematic care to perform the work of measuring every structure, building, roadbed and track, it has, perhaps, been more difficult to determine what template or unit value to apply to the quantities of each of the thousands of various items, as well as to classify same under the tax law of the state.

Problems of law and economics were presented continuously throughout the work. These questions required immediate set-

tlement in detail and in a practical manner; and, since there are few court decisions bearing on the various phases of the work, the writer was compelled to decide many important questions which properly belonged to the dominion of the highest court in the state.

The valuation of Subdivision IV., as well as the fixing of the situs and the value of the rolling and the floating equipment, was the most important of our problems.

It is believed that, under existing statutes, we are required to value the property of each railroad and canal company, regardless of the fact that such company may have lost its practical identity by being merged with a large railroad system. These minor corporations are merely constituent companies of a great system.

In the case of the Central Railroad Company System of New Jersey, there are twenty-seven constituent companies, each of which has been treated as a separate corporation. We are advised by the management that no accounting of rail operations of these minor corporations is kept. The same report is made as to the Delaware, Lackawanna and Western Railroad, as well as the majority of railroad systems in the state.

The money for the payment of the taxes levied on these minor companies is, we are informed, taken from the treasury of the operating company, and, if there is no accounting kept with these minor roads, no distribution of the tax is made.

Few, if any, of these minor companies own any equipment or tidewater terminals, and it would greatly simplify the work and records of the state if the tax were levied against the system. This will be more appreciated when it is known that there are one hundred and twenty-five railroad and canal corporations operating through four hundred and fifty taxing districts in this state.

The State does not require the railroads to furnish statements of car miles, or of the time that rolling equipment is in the state. Such data should be compiled in order to assist in the allocation of such equipment.

Reports are made to the comptroller under an ancient act of 1852, amended in 1873. This act calls for a brief statement of

income under three headings: "Passenger," "Freight," and "Other Sources"; also for a statement of expenditures under the titles: "Repairs," "Maintenance of Way," "Motive Power" and "Contingencies.'

There is no analysis of these reports, and there is no means of knowing whether betterments and additions are included in "Expenditures."

Since all of the railroad systems are interstate roads, there is nothing to show what the earnings and expenses are in the state.

We think that, if it is to be required hereafter to determine value for each of the railroad corporations, then these corporations should be required to furnish statements of operating results.

It is with pleasure that I direct attention to the men who composed my staff. The work was difficult and trying, and required the services of engineers with knowledge of railroad construction and maintenance. The assistant engineers were each in charge of a field party of six men. They were required to copy their field notes and send same to this office each day; and they were also required to make computations of quantities each day after the field work was completed. They were industrious and competent.

I have been ably assisted by Mr. Louis Focht, Chief Engineer, whose intimate knowledge of all the railroads of the State, gained by some twelve years' study as Engineer of the State Board of Assessors, was particularly valuable.

CHARLES HANSEL,
Expert in Charge.

December 18th, 1911.

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General Staff Railroad and Canal Revaluation, 1911.

LOUIS FOCHT, ... *Chief Engineer.*
EUGENE Y. ALLEN, ... *Office Engineer.*
ALBIN G. NICOLAYSEN, ... *Engineer in charge of Estimates, Bridges and Buildings.*
J. S. ARNOLD, ... *Assistant Engineer in Charge of Field Party.*
ROBERT G. BOWIE, ... *Assistant Engineer in Charge of Field Party.*
CHARLES E. BROWN, ... *Assistant Engineer in Charge of Field Party.*
THOMAS E. COLLINS, ... *Assistant Engineer in Charge of Field Party.*
H. L. FRYER, ... *Assistant Engineer in Charge of Field Party.*
EDWARD J GRASSMANN, ... *Assistant Engineer in Charge of Field Party.*
WILLIAM M. KENNEDY, ... *Assistant Engineer in Charge of Field Party.*
CHARLES T. LONG, ... *Assistant Engineer in Charge of Field Party.*
WILLIAM MCCORMICK, ... *Assistant Engineer in Charge of Field Party.*
WILLIAM A. ROBINSON, ... *Assistant Engineer in Charge of Field Party.*
WILLIAM H. HARRISON, ... *Machinery Expert.*
WILLIAM F. KEOHAN, ... *Special Assistant on Land.*
RICHARD G. SIEGEL, ... *Signal Expert.*
G. A. DUBUY, ... *Inspector of Equipment.*
RAYMOND W. OAKLEY, ... *Chief Clerk.*

Railroad and Canal Revaluation, State of New Jersey.

Instructions for Guidance of Employees.

CHARLES HANSEL,
Expert in Charge.
LOUIS FOCHT,
Chief Engineer.

Office of Charles Hansel, Expert in Charge of Revaluation of Railroads and Canals, State of New Jersey, #55 Broad Street, Elizabeth, N. J.

Rules and Instructions for the Guidance of all Employees in the Revaluation of Railroads and Canals, State of New Jersey.

May 1st, 1910.

CLASSIFICATION.

I. The length and value of the main stem of each railroad, and of the water-way of each canal and the length of each main stem and water-way in each taxing district.

II. The value of the other real estate used for railroad or canal purposes in each taxing district in this state, including the roadbed (other than main stem), water-ways, reservoirs, tracks, buildings, water-tanks, water-works, riparian rights, docks, wharves and piers, and all other real estate, except lands not used for railroad or canal purposes.

III. The value of all the tangible personal property of each railroad and of each canal company.

IV. The value of the remaining property, including the franchise.

MAIN STEM.

The term "main stem of each railroad company," as used in the act to which this act is a supplement and in the acts amendatory thereof and supplementary thereto, shall hereafter be held to include the roadbed, not exceeding one hundred feet in width, with its rails and sleepers, and all structures erected thereon

and used in connection therewith, not including, however, any passenger or freight buildings erected thereon.

GENERAL INSTRUCTIONS.

OBJECT.

1. The object is to secure such complete notes of all the property belonging to or used by the railroad and canal companies as will enable this office to make up a complete inventory of all tangible property belonging to and used in the business of the railroad and canal companies.

The duty of the field forces is to measure and record the physical property without any regard to the purpose for which the valuation is to be made.

The measurements, records and notes must be so full and clear that they can be understood and worked up by the draughtsmen, computers and clerks in the office.

TAXING DISTRICTS.

2. For the purpose of administering the laws of the state relating to taxation, it is necessary to take note of the geographical boundaries of the several taxing districts through which the railroads pass and to inventory separately the railroad and canal property in each individual taxing district. In other words, each such district must be regarded as a composite unit in making up the inventory. The notes, therefore, must be kept with this subdivision in view, and property must be listed in the district in which it is found. Where any uncertainty exists as to the location of the boundary lines, they should be verified by inquiry and observation, though it will not be necessary to actually survey these boundaries.

ABANDONED PROPERTY.

3. The object being to secure an inventory of property now used by or having some present value to the railroad and canal companies for their purposes, abandoned or useless property will not be surveyed. This applies particularly to abandoned roadbeds formerly occupied by the main-line tracks of railroads where the location has been changed, the grading, masonry and other structures of which are not now, nor likely to be in the future, used for any railroad purpose. Such old abandoned roadbed and other structures will not be measured, but must be reported as fully as circumstances permit. Movable property found in such abandoned roadbeds, such as old rails or other railroad material having a market value or that may be again used for railroad purposes, will be inventoried, and the land will be noted, measured and reported.

AGE DEPRECIATION AND PRESENT VALUE OF PROPERTY.

4. It is made the duty of this office to make a true and complete inventory and appraisal of the true value of railroad and canal property. In order to make such a determination, three principal facts or elements must be known:

a. What would be the value of the permanent way and structures, new, at the present time and under existing conditions.

b. To what extent has the property depreciated in use, by reason of decrepitude or obsolescence, since it was constructed.

c. What is the value of the land used for railroad and canal purposes.

It is, therefore, very important that the age, the present condition and the relative part of the useful life or service that has already expired, of the various items of property, shall be noted and recorded. This will, generally, be estimated by the assistant engineer and will be recorded in the proper column of the note books on a scale of 100. The number "100" will be used to represent the condition of the property NEW and the number "0,"

to represent the value when the property is WORN OUT and must be renewed. Thus, the condition of a new cross tie would be marked "100"; but, if the tie were so decayed or worn out that it should be at once replaced, its condition would be marked "0" (zero). If half its useful life had been served, it would be marked "50." This rating will be regardless of the original cost of the article and of its value as scrap.

No definite or invariable, general rules can be formed to guide the engineer in this rating. He should obtain all the facts it is practicable to get and exercise his best judgment. When in doubt about specific cases, he should refer the matter to this office and ask for instructions. The actual life or durability of a structure is not always a sufficient criterion. Thus, a steel bridge might, so far as natural decay or endurance of wear was concerned, be good for a life of fifty years; but, if, because of increased weight of equipment, it should be renewed in five years from date of inspection, its useful life should be considered as terminating at that time.

FIELD PARTIES.

5. The field parties will be organized under the direction of the chief engineer and their personnel shall not be changed unless authority is given by this office or by the chief engineer, except that the assistant engineer may, in emergencies, fill vacancies temporarily and may employ additional temporary help if necessary. But all such temporary changes shall be promptly reported to the office, with full names, occupations, rates of pay and time employed.

SALARIES AND EXPENSES.

6. Salaries and rates of wages will be fixed by this office and may or may not include traveling and boarding expenses, while actually at work, as may be directed or approved. Railroad fare, instruments, tools and equipment will be furnished by the State; but all expenses for subsistance or for other personal matters

must be paid by the individual incurring same. The law requires that bills for purchases amounting to five dollars and over shall be accompanied by a sworn statement by the seller, certifying to the correctness of the account, etc., and "Form 12" is a blank for this purpose, which the assistant engineer shall require to be executed. This requirement, to make a sworn statement, does not apply to expenditures for boarding and traveling. All persons authorized to return expense accounts must comply with these provisions.

EXPENSE ACCOUNTS.

Expense accounts shall be made out on "Form 11." These expense accounts must be sworn to by the person in whose favor they are made, in accordance with the blank affidavit on the face of the voucher. Expense accounts amounting to less than five dollars do not require to be thus sworn to.

PAY ROLL.

Assistant engineers in charge of field forces will be furnished with "Form 9" and are instructed to enter on same the names of all employees under their direction, together with the occupation, rate of pay per month or per day, the total number of days, the total amount earned, deductions from the total amount earned, and the amount due.

In compliance with the statutory provisions, it will be necessary for each person named on the pay roll to sign same in the right-hand column, on the same line on which his name appears in the left-hand column, before the pay roll is sent into the office. This signature is necessary to conform to the law.

"Form 9" must be filled out on the first of each month, unless otherwise instructed, and, as soon as filled out, the assistant engineer will certify to the correctness of same on the certificate on the back of the pay roll, which reads as follows:

> "I hereby certify that the persons named in the foregoing pay roll, or estimate, are employed solely in the

proper duties of the positions and employments indicated, and that persons described therein as 'laborers' are employed at ordinary unskilled labor only."

In case there are no laborers employed, then the assistant engineer may draw an ink line through the words "and that persons described therein as 'laborers' are employed at ordinary unskilled labor only." The assistant engineer will then forward the same to this office.

METHOD OF PAYING.

Payment of pay roll accounts will be made through the assistant engineer, in properly addressed and sealed envelopes, for each person, which will be prepared and delivered to the assistant engineer by this office. Each person, on receiving one of these envelopes, shall open it and count its contents in the presence of the assistant engineer and, if found correct, he shall sign the duplicate pay roll in the right-hand column, opposite the entry of his name on the pay roll. The pay envelopes shall be delivered to the persons to whom they are addressed only, except in cases where a written order for the same, signed by the payee and sworn to before a notary public, shall be presented to the assistant engineer. In such cases, the person receiving the envelope shall write the name of the person whom he is authorized to represent, together with his own name, on the pay roll and the written order shall be attached thereto. Undelivered envelopes shall be promptly returned, unopened, to this office. The assistant engineer shall be held personally responsible for the delivery of pay envelopes to any person other than the persons to whom they are addressed. All persons accepting service under the direction of this office must distinctly understand that this office is acting for the State of New Jersey under the authority of special legislation and that all pay rolls have to be sent to the capitol at Trenton for approval before they can be paid, and it is probable that some time will be required to complete the transaction and to deliver the money into the hands of the several employees; and it is to be generally understood that the payment may not be made earlier than two

weeks after the pay roll has been forwarded to this office by the assistant engineer. A supply of the blank forms herein referred to will be furnished.

SAFETY PRECAUTIONS.

7. All the members of the field parties, while engaged upon their work, must exercise the greatest care to avoid accidents to themselves by passing trains. They should not walk or stand on or between the tracks except when absolutely necessary. Each one should look out for the safety of the others as well as for his own safety and warning signals should be given at the approach of trains. This office assumes no responsibility for any accident or injury that may occur.

NO PUBLICITY ALLOWED.

8. While everyone with whom employees may come in contact, either on or off the work, should be treated with courtesy, reticence about the business or work of this office must be the rule. No interviews with employees must appear in the public press, and all employees are cautioned against talking of their work to anyone not directly connected with the work.

FIELD BOOKS, NOTES, ETC.

9. All field books, maps, sketches, notes and memoranda, computations and all other information furnished to or obtained or prepared by the assistant engineers or by members of field parties or other office or miscellaneous employees, while in the employ of this office, are the property of this office, and must be returned to and filed in this office.

DUPLICATE COPY OF FIELD NOTES.

Each evening a copy of the field notes taken during that day shall be made upon paper furnished for that purpose and shall then be mailed to this office.

As note books become filled, they shall be forwarded to this office, by express, as soon as practicable.

PHOTOGRAPHS.

Photographs must be taken of all important structures, stations, bridges, etc. Views should be taken in such manner as to bring out the salient features of the object.

REPORT CARDS, FORM 10-A.

10. All assistant engineers are required to send daily reports to this office on cards (Form 10-A) furnished for that purpose, and the following is a memorandum of the points to be covered:

Number of station at which work was begun that day and number of station at which work was stopped for the day.

In case it is necessary to show a distinction between the stations covered by the topography party and those covered by the cross-section party, make a memorandum stating which stations relate to topography and which relate to cross-sections.

Where main line and branch lines have been worked on durin the same day, make a distinction between the main line and the branch.

The number of main tracks on the line covered for that day should be noted.

Estimate the average depths of cuts and fills and note same on card.

Unless the distance between the topographic party and the cross-section party is considerable, note the stations completed for that day.

We prefer having but one memorandum made for the daily progress.

Be careful to note, under the head of remarks, the stations between which you expect to work during the following day. This is necessary in order that we may be able to locate you should we desire to do so.

SUPPLIES.

11. Wherever practicable, the assistant engineer will make timely requisitions for any supplies that may be needed on the work; but, in emergencies, or where the work would otherwise be delayed, he may make necessary purchases in the field.

ADDRESSES.

12. Assistant engineers will keep the office advised, at all times, of any changes in their mail and telegraph addresses and telephone calls. This information should be sent in with the daily progress reports.

FIELD PARTIES ON GRADUATION MASONRY, BUILDINGS AND TRACK.

ORGANIZATION OF FIELD PARTIES.

13. A field party for inventorying, graduation, masonry, building and track will generally consist of one assistant engineer, one field assistant and four chainmen.

The assistant engineer will have charge and control of the party and he will report to the chief engineer.

EQUIPMENT.

14. Each party will be supplied with the following outfit:

1 prismatic compass.
2 100-foot steel chains.
2 50-foot metallic tapes in boxes.
2 50-foot metallic tapes without boxes.
2 5-foot folding rules.
1 level rod.
1 cross-section rod.
1 set measuring pins.

1 doz. pieces lumber crayon.
1 6-inch triangular scale.
1 doz. 3-H pencils.
½ doz. note books.
½ doz. pencil erasers.
1 pair machinist's calipers.
1 register.
½ doz. small scratch pads.
1 camera.
1 copy Henderson's Tables.
Forms and stationery.

GENERAL PROGRAM FOR FIELD WORK.

15. The work will proceed within the following order:

a. The centre line of the road will be determined and measured.

b. The boundaries of land will be ascertained, measured and sketched.

c. The roadbed will be cross-sectioned for computing the excavation and embankment (grading).

d. The masonry of bridges, culverts and other structures and all piles, timber or other material connected with them will be measured and recorded.

e. The iron and steel bridges will be measured and recorded.

f. The track and all its appurtenances, excluding train signals, will be measured and sketched.

g. The buildings, of every character, will be noted.

h. Any and all other structures and fixed and movable property of the railroad will be noted.

FIXING THE CENTRE LINE.

16. The CENTRE LINE of the railroad will be assumed to be located as follows:

On single-track roads, midway between the rails of the main track.

On double-track roads, midway between the two main tracks.
On three-main-track roads, midway between the rails of the middle track.
On four-main-track roads, midway between the inner rails of the inside tracks.

ALIGNMENT.

The stations of ALL points of curve and tangent of the centre line shall be noted, together with the direction of the curve—namely, whether to the right or to the left. The degree of curve shall also be determined by measuring the middle ordinate of a 100-foot chord formed by stretching the chain along one of the rails.

The stations of the points of curve and tangent are to be determined by the eye.

Where, for any reason, the centre line is not thus clearly defined or where it is difficult to determine, as at terminal stations, the facts should be submitted to this office and the necessary instructions requested.

LOCATING STRUCTURES.

Offset measurements from the centre line should be taken to all structures to determine whether they are to be classed as main stem or as second-class property; all the structures within the 100-foot width being main stem, excepting passenger and freight stations, and those outside being second-class property. In some cases, structures will be found partly inside and partly outside the main stem. In such cases, sufficient measurements are to be taken to determine the portion lying inside and that lying outside the main stem. Too much time must not be given to unimportant details.

The location of the mile posts should be noted and recorded. Station "0," and each one thousand feet thereafter should be marked by a vertical chalk line on the outside of the left-hand rail and the station number should be marked upon the nearest tie.

TAXING DISTRICT BOUNDARIES.

At the point where the boundary line of taxing district crosses the centre line, the station and direction of the boundary shall be noted.

The centre-line chaining should be done with sufficient accuracy so that the error shall not exceed 0.5 foot per mile.

LEVELS.

17. No continuous line of levels will be taken along the centre line. For all cross-section and measurement work, the base of the left-hand rail nearest the centre line will be used as a datum. Elevations above this datum are to be marked "plus" and those below "minus." These elevations will, generally, be taken with a Locke level or with the cross-section rod.

LAND AND OTHER REAL ESTATE.

18. Where possible, plats of the more important parts will be supplied, to the assistant engineers, purporting to show the location and the dimensions of the land belonging to or controlled by the railroad company. These should be, generally, verified or corrected in the field; but it is not intended that complete surveys shall be made.

However, where there appears reason to believe that the plats are inaccurate or incomplete, sufficient measurements should be made to verify or to correct them.

All lands belonging to, or reputed as belonging to or as being controlled by the railroad company, whether shown on the plats or not, or whether contiguous to the right of way or not, should be noted and reported; and all obtainable information relating to the location, extent and character of the property, and, particularly, to the use made of same, should be given. Where buildings other than railroad structures are found on such land, their

general character and size should be reported; but detailed descriptions of buildings of this character need not be given.

CHARACTER OF LAND.

Assistant engineers are required to note the character of the land adjoining the right of way along all lines, recording the same on their notes and reports. Classify same under the following headings:

TIMBER LAND, MARSH LAND, SALT MEADOWS, FARM LAND, UNDEVELOPED BUILDING LAND, CITY PROPERTY.

GRADING.

19. Under this head, will be classed the excavations and embankment for the roadway, side ditches, etc. Excavations for foundations of structures should be noted separately; also, excavations and embankments for wagon roads, ground for buildings, etc. The dimensions for ordinary side ditches, where not standard, may be roughly measured or estimated by the eye.

CROSS SECTIONS.

Cross-sections of the cuts and fills of the roadbed shall be taken at such distances apart as may be necessary to compute with approximate correctness the cubic contents of the intervening prisms, which may be anywhere from ten feet to five hundred feet long, as the configuration of the original ground surface may permit.

Generally, it will be found that, in constructing the road, standard widths of roadbed and degrees of slopes were used. Where this is found to be so, it will be necessary to measure and record only the outside cut or fill on each side, giving a general statement of the standard dimensions. Where such standard dimensions do not apply, sufficient measurements must be taken to compute the area of the cross-section with reasonable accuracy.

The width of the roadbed with the depth and distance out at the junction of the slopes and the original natural surface will be, usually, sufficient in such cases. Cuts and fills may be determined with cross-section rods. Waste banks and borrow pits will not be included in the measurements unless they are of some present utility to the road; but deviations from the standard width of the roadbed or of the slopes caused by or resulting from the construction or the subsequent maintenance of the road should be measured. Thus, a slide in a cut which it was not necessary to remove will be measured like any other excavation. It will, no doubt, often be found that it is difficult to determine accurately the original outer cut or fill; and, where this is the case, the assistant engineer will use his best judgment in the matter.

In the proper columns of the note book, the following information should be recorded:

a. The character of the material excavated from cuts if other than that which should be classed as earth, hard pan, solid rock, loose rock, etc. Where two or more kinds of material are found in the same cross-section, the notes must give the necessary data for computing each separately.

b. The condition of the slopes, whether sodded or bare, and an abnormal condition found. If terraced, a rough estimate of the work required for terracing, etc., should be noted.

c. If retaining walls, slope walls, or rip rap of any kind are found at the foot of the slopes, their location, dimensions, character of material, quality of workmanship and present condition should be noted so that the quantities can be computed.

d. In cuts and embankments extending outside of the standard road section, where such extra width is of present utility to the road, the purpose for which work is useful should be noted.

e. All changes of streams, drainage ditches other than standard side ditches, excavations for foundations of structures, embankments for dikes, etc., should be measured and recorded; and, where it was "probably wet," that fact should be noted. However, work of this class made for abandoned roadbeds, and not necessary or useful for the protection of the present roadbed, should not be included.

f. Where embankments end against bridge abutments, the station and plus of the terminal cross-section should be so chosen that the adjoining prism will give the quantity of embankment with approximate correctness.

Field engineers are required to work up their cross-section notes every evening after the day's work is finished. These calculations must be made in accordance with the following instructions (Henderson's Earthwork Tables are furnished as a part of the equipment):

AREAS OF CROSS-SECTIONS.

(See Diagrams.)

Using Formula $A=\frac{1}{2}\ (h''\ (B'+b'')\ +h'\ (B''+b')\ )$.

Having obtained from notes the values of h', h'', (B'+b'') and (B''+b')

Find, from the scale at the side of the diagram, the horizontal line corresponding to the value of (B'+b'').

Find the point where this line intersects one of the oblique lines corresponding to the value of h''.

The value of the vertical line (read at top or bottom of the diagram) running through the intersection gives the value of $\frac{1}{2}\ (h''\ (B'+b'')\ )$ in square feet.

Find similarly the value of $\frac{1}{2}\ (h'\ (B''+b')\ )$.

The sum of the two above values gives the area required in square feet.

EXAMPLE.

Assume Section $\frac{+2.0}{17}\ \frac{-1.3}{14}$ C. L. $\frac{-1.1}{13}\ \frac{+6.8}{27}$

then h'=3.3; h''=7.9; b'=14; b''=13; B'=17; B''=27; and h' (B''+b')=3.3 (41); h'' (B'+b'')=7.9 (30).

Find on the diagram the horizontal line corresponding to B''+b'=41. This is the second line above the 40 at the left of the sheet.

Follow this horizontal line across the page to the point of intersection with an oblique line representing $h'=3.3$ (Interpolate between lines shown for $h=3$ and $h=4$). Following the vertical line running through this point (bottom of the diagram) it will be found to be at 68. Similarly, the value of h'' $(B'+b'')$ is found to be 119. Adding these two gives the area required —187.

HIGHWAYS AND HIGHWAY CROSSINGS.

20. Care must be taken to ascertain whether highways, parallel to or adjoining the railroad, were graded by the railroad company; and, where this is so, the quantity of grading must be measured.

It will be assumed, in the absence of information to the contrary, that highway crossings of the railroad were graded by the company, and the quantity of such grading, as well as all other materials used in the construction, will be measured.

PAVED STREETS.

21. Paved streets or driveways along side tracks, etc., constructed by or for the railroad company, and for its use, should be measured and reported and the quantities of excavation and foundation noted, as well as the kind and area of surface pavement used.

Sufficient measurements are to be taken to determine the portions inside and outside the main stem.

MASONRY.

All masonry, of whatever kind, constructed by or for the railroad company and now utilized by it, will be measured with care. It is possible that the plans, quantities, etc., of some of these structures may be obtained from the railroad company; in which case, the assistant engineer will be notified by this office. In such cases, only the location of the structure and notes of its

present condition need be recorded by the assistant engineer.

Where it is necessary to measure up such work, it may not always be possible to get the dimensions of parts that are covered up or of the depth and dimensions of foundations. In such cases, the assistant engineer will use his best judgment in noting the dimensions of the parts not accessible for measurement; but such assumed or approximate dimensions must be followed by an interrogation mark.

Rough sketches of all masonry structures, with marked dimensions, will be used to record masonry structures.

CLASSIFICATION OF MASONRY.

Masonry will, generally, be classified in accordance with the report of the committee of the American Society of Civil Engineers (See Appendix A). Brick and concrete masonry will each form a class by itself. Note, in each case, whether the masonry is laid dry or in mortar.

The character of the foundations of masonry structures, whether of masonry, concrete, piles or timber, the dimensions of same, the present condition and all information necessary to estimate the value will be noted as a part of masonry structures.

BRIDGES AND VIADUCTS.

23. It is expected that the quantities of metal in all bridges may be obtained from the railroad company, in which case the assistant engineer will be notified. Otherwise, sufficient measurements must be taken to enable the weights to be computed with reasonably close approximation.

In measuring and recording the dimensions of bridges, the following general instructions will be used:

a. In pin-connected bridges, with parallel top and bottom chords, the length of span will be from centre to centre of end pins and the heighth, the vertical distance between the centres of top chord and bottom chord pins.

Where the chords are not parallel, the depths at the ends and at the centre of the span alone will be noted. The width will be measured from centre to centre of outside trusses. The number of trusses and of tracks carried shall be noted.

Ordinarily, it will not be necessary to measure all the members of the truss, but the length and size of end posts and sections of the top and bottom chords at the middle of span should be obtained and recorded. The character of the floor should be noted and the floor sketched. In riveted trusses the length will be measured from out to out and the height from centre to centre of chords.

b. Plate girder bridges should, usually, be sketched and all important dimensions given. In the cases of wooden and pile bridges, the notes taken should be sufficient to enable the computation of quantities to be made with approximate correctness.

c. In the case of highway bridges over railroads, it should be ascertained whether they were erected by and wholly owned by the railroad companies. Where they are wholly owned by the railroad companies, the exact condition of ownership should be ascertained and reported. Bridges in which the railroad companies have no interest need not be carefully measured.

Bridges and viaducts will be located by giving the station and plus at the face of abutments and the centre of piers. If the bridge is numbered, its number (and its common name) should be given.

(See Diagrams.)

TRACK AND ITS APPURTENANCES.

24. Generally, the measurements and notes obtained and sent in must be sufficient to enable the draughtsmen to make a complete map of the work, showing the location of all tracks and track appliances and appurtenances.

Among other facts to be noted are the following:

a. Weight, date of rolling and present condition of rails. In connection with the work, it will be understood that it will be necessary to make a note, every few miles, of the length of rails

used on the various roads which are being examined. This will be necessary in order to enable this office to determine the number of splice bars used per mile. The measurement should be taken, to test the length, in order to determine whether any change occurs.

The division points where changes occur between the use of rails of different lengths should, of course, be noted.

For example: If 30′ rails should be used up to a certain station and, at this point, 33′ or 45′ rails were used, the station should be noted and a memorandum should be made to that effect.

To determine the size and weight of rail sections, take the measurement shown on the accompanying blue print. Wherever stub ends of rail can be found, trace the contour of the section upon a piece of paper and forward to this office with the regular notes.

Most Roads place emergency rails along the right of way at intervals of a mile or two. These can be used for this purpose where available.

One diagram of this character will answer between all points where this rail has been used. Diagrams are to be forwarded to this office with a memorandum giving, as nearly as possible, the stations between which the section will apply.

To confirm weights obtained in this manner, make inquiry of engineers, supervisors and track foremen as to the weights of rails in use. This latter information shall be recorded in notes with the source from which obtained.

b. Kind, dimensions and weight of rail joints, tie plates, rail braces and spikes.

c. Kind and condition of ties and number used per mile.

d. Kind and condition of ballast used. The width, depth and contour of the ballast will be assumed to be in accordance with the standard sections adopted by the railroad, except in cases where, for good reasons, same does not obviously conform thereto.

e. The character and condition of all switch stands and their attachments will be noted.

f. All other property or appliances not mentioned above, connected with or appurtenant to the tracks, shall be noted and recorded, unless distinctly excepted in these rules.

MAIN STEM AND SECOND-CLASS.

Sufficient measurements must always be taken to separate the length of the trackage within the main stem from that without, or second-class property.

Where siding and spur tracks extend into factories and other private industries, inquiry must be made to determine the extent of the railroad company's ownership.

BUILDINGS.

25. Sufficient measurements and notes are to be taken to accurately locate the position and dimensions of every building found on railroad property or used for railroad purposes, and all data necessary to enable an estimate to be made of their value shall be taken, except in cases where satisfactory plans are obtainable. Office furniture and supplies shall be observed and estimated, but no itemized list shall be made.

FENCING.

26. The length (in feet), character, age and present condition of all fencing on railroad land will be measured and noted. Snow fences, wherever found, should be noted.

WATER SUPPLY.

27. The field forces will be expected to record all data under "water supply." All other machinery will be taken by the machinery expert. Under this head shall be measured and noted all property connected with the supplying of water to locomotives and shops, and for any purpose other than plumbing in passenger and freight station. Among the items covered under this head may be enumerated:

The work and material for all intakes, dams, reservoirs and their appurtenances.

All pipe and specials used for conveying water.
All pump houses and the pumps and machinery therein.
All water towers, tanks and standpipes.
All track water troughs and their attachments.
All out-door hydrants for fire or other purposes.

TRACK TANKS.

Measure section and length or troughs; measure the length and dimensions of all drains under tracks, or elsewhere, used in connection with the tank. Obtain the size and length of all steam-heating pipes and water-supply pipes.

WATER TANKS AND PUMPING WELLS.

Measure the diameter of all tubs and length of staves. Obtain dimensions of trestle supports; size and character of masonry and concrete foundations; the rated capacity (in gallons) of the tank, together with condition of tank.

For pumping wells: Measure the diameter and depth of the well and the dimensions of the lining or curbing, if any. The object is to obtain sufficient data for the purpose of making an estimate of cost.

SIGNALS.

28. The assistant engineer will, unless otherwise instructed, ignore the property and appliances of the track signaling system, and the interlocking, except that the LOCATION of signal towers and other important fixtures will be noted so that they may be properly inserted on map.

All other signs, mile posts, road-crossing or crossing gates, whistle and bell signals, etc., shall be inventoried and described.

TELEGRAPH AND TELEPHONE LINES.

29. Estimate the height of poles and determine the number per mile. Note the number of cross-arms and the number of

pins in each; also, note the number of wires and distinguish, where possible, between copper and iron. Indicate the number of guys.

HIGHWAY-CROSSING GATES AND BELLS.

30. All highway-crossing gates and bells are to be located and the name of maker taken; also, the method of operation is to be described. In case of bells, state whether controlled by line or by track circuits, giving the length.

TRACK TOOLS.

31. All track tools found in section houses or on the road, including hand cars and small trucks, shall be inventoried. Where construction or reconstruction work may be in progress, the plant and tools employed (including derricks, engines, boilers, pile drivers, pumps, etc.), when they belong to the railroad company, and all the construction material will be inventoried; but not the locomotives or the flat cars that belong to the rolling-stock equipment of the road.

MISCELLANEOUS STRUCTURES AND PROPERTY.

32. Care must be taken to include in the inventory all and every structure, property or appliance used for railroad purposes, whether enumerated herein or not, recording all the data necessary to form an estimate of its cost or present value.

The field parties are expected to make complete records of all real estate and of such tangible personal property as is found along the line; also, general supplies in stations, section houses, etc. All machinery not listed under "Real Estate" will be taken by the machinery expert.

CLASSIFICATION OF REAL ESTATE.

1. Ash-handling machinery.
2. Aerial tramways.
3. Ballast.
4. Boilers.
5. Bridges.
6. Buildings.
7. Cables.
8. Canals.
9. Cattle guards.
10. Chimneys.
11. Cisterns.
12. Conduits.
13. Conveyors.
14. Crossing gates.
15. Culverts.
16. Cupolas.
17. Dams.
18. Docks.
19. Electric wiring.
20. Elevators.
21. Coal-handling stations.
22. Fencing.
23. Fixed cranes.
24. Foundations.
25. Gas piping and fixtures.
26. Grain elevators.
27. Heating apparatus.
28. Hydrants.
29. Incline machinery, canal.
30. Interlocking.
31. Lands used for R. R. purposes.
32. Lighting apparatus.
33. Lock-operating machinery.
34. Oiling system.
35. Piers.
36. Pipe lines.
37. Pavements.
38. Planking or guard rails.
39. Reservoirs.
40. Riparian rights.
41. Roadbed.
42. Road crossing.
43. Sanitary apparatus.
44. Sewers.
45. Shafting.
46. Shop fixtures.
47. Shop tracks.
48. Signs.
49. Signal apparatus.
50. Smoke stacks.
51. Storage warehouse and miscellaneous structures.
52. Structures.
53. Switch boards.
54. Tanks.
55. Telegraph and Telephone lines.
56. Tile drain lines.
57. Tracks.
58. Track appurtenances in place.
59. Track scales.
60. Tramways.
61. Transfer tables.
62. Traveling cranes,
63. Trestles.
64. Tunnels.
65. Turntables.
66. Viaducts.

67. Water lines.
68. Water purifying plants.
69. Water tanks.
70. Water-ways.
71. Water works.
72. Wells.
73. Wharves.
74. Windmills.

All items of fixed character not enumerated in the foregoing list are to be classified as real estate.

The following must be carefully noted by the assistant engineers:

BOILERS.

Name of maker, if obtainable; type—*i. e.,* whether vertical, locomotive, return tubular or water tube. For vertical and locomotive boilers, measure diameter or circumference at the waist. Obtain the length of the boilers; the number; the diameter and the length of flues; the diameter and approximate height of stack; and the rated horse power of the boilers. This latter information can, usually, be obtained from the engineer or from the fireman. Also, obtain the age and condition of boilers.

PUMPS.

Name of maker. State whether single or duplex and give diameter of steam cylinder. Give diameter of water cylinder and length of stroke; also, diameter of steam pipe and size of suction pipe and of the discharge pipe.

DYNAMOS AND ELECTRIC GENERATORS.

Name of maker. Age and condition. Type of machine; whether direct current or alternating; also, get a record of the rating plate, which usually gives the number of machine, the volts pressure, the amperes and the kilowatt capacity. If this data is not given on rating plate, obtain best record possible by inquiry.

STEAM ENGINES.

Where found in pumping plants along line, give name of maker; kind of engine—*i. e.,* whether simple, compound or triple expansion; the diameter of cylinders; also, length of stroke; steam pressure for which the engine was designed; and rated horse power.

HEATING PIPES.

In all shops and roundhouses, storehouses, etc., with the exception of the Meadows Shops and the Trenton Shops, measure the linear feet of steam-heating pipe in the buildings; also, obtain diameter of the piping, in order that we may calculate the linear feet of each size of pipe, making a record of all manifolds or headers connecting the ends of the heating coils. In case goose necks or return bends are used in place of headers, a memorandum should be made to that effect.

TURNTABLES.

Measure the diameter of the turntable, the thickness and the height of centre wall, and the width of bench supporting centre rail. Note the weight and the method of supporting centre rail, the size of the centre pier; the kind of paving in pit, if any; the style, the make and rated horse power of motor operating turntable; also, take measurements of girders, such as the depth and thickness of the web stiffners, the number and the dimensions of members comprising the cross frames, together with the lateral bracing. In case the measurements for one turntable can be applied to another, detailed measurements need not be repeated; but a reference note should be made to that effect. In such cases, however, it will still be necessary to measure the diameter of the pit, the length of the turntable, and the depth at centre and ends, together with the cross spacing of the girders.

CRANES.

For cranes of standard pattern, such as the freight transfer cranes manufactured by the Industrial Iron Works, Bay City, Michigan, it will simply be necessary to obtain the height of the girders above the ground, the distance between the supports, the capacity of the crane and memoranda as to the method of operating same, and the dimensions of the foundations. In other cases, it will be necessary to make more complete measurements.

Of course, it is always understood that the name of the maker of each crane, together with the number, should be reported where same can be ascertained. For cranes or derricks of special design, where found on docks, on trestles or in yards, a sketch should be made, to give a general idea of the design of such machines, in addition to the information asked for above.

NOTE BOOKS AND THEIR USE.

Note books will be provided, and the notes are to be kept in accordance with the standard form shown in appendix.

Topography note books on the main line will be numbered "T-1," "T-2," etc., in consecutive order, for the whole line. The topography notes for the branch lines will be numbered "TB-1," "TB-2," etc., in consecutive order, for all branches. All cross-section notes on the main line will be numbered "X-1," "X-2," etc., in consecutive order, for the whole line. The cross-section notes of branch lines will be numbered "XB-1," "XB-2," etc., in consecutive order, for all branches.

When the cross-section party is engaged in measuring buildings or other structure, note books will be numbered "ST-1," "ST-2," etc.

As many branch lines may be recorded in the note books as convenient.

SIGNALING AND INTERLOCKING.

34. The assistant engineer in the signal department will be called the "Signal Engineer," and he will report directly to this office.

35. It is expected that the field inspectors will be furnished complete signal plans of each interlocking plant and signal system. In case, however, such complete plans cannot be obtained from the railroad, it is expected to furnish the field inspectors with the plans showing all the tracks involved in the signal installation.

SIGNAL PLANS.

In case complete signal plans are furnished, then the field inspectors will check location of all signals and switches operated; and, in checking the location of such signals and switches, reference should be made to the station and plus of the centre line survey made by the assistant engineer. Where this survey has not yet been made, the measurements may be taken by counting the rails. In case the field inspectors are furnished only the plan showing the tracks, they will be expected to locate and show in the plan all the signals and switches operated; and, in the location of them, they will use their judgment as to the means of determining same.

SIGNAL FORMS.*

36. The following forms have been prepared for the guidance of the field inspectors for inventorying signaling and interlocking:

Form	100.	Manual Interlocking.
"	100A.	Control Manual Block.
"	101.	Miscellaneous Signals, Crossing Gates, Alarms, etc.
"	102.	Electric Interlocking.
"	103.	Automatic Signals.
"	104.	Pneumatic Interlocking.

* Signal forms are made a part of the instructions by reference.

37. While it is expected that all field inspectors and field men will secure an accurate record of all items set forth in the various forms described in Article 36, it must be understood that the purpose of this inventory is to establish value; and it is manifestly unwise to attempt to be minute in the inventory where no particular value is involved. Since this office cannot lay down a rule of division as between the important and the unimportant, it will be the duty of the signal engineer to conduct the work in a reasonable and sensible manner.

38. Although the forms before described are prepared in such a manner as to permit of a broad division of the cost of each signal plant, it has been found necessary to group a number of items under one heading; such as "Signal Complete," "Signal Switch Complete," etc. Diagrams of signals accompany these forms; and, in case signals are found in use which are not shown on these diagrams, the field inspectors shall make sketches of same to accompany this report.

39. The field inspector will be provided with field books, in which he will be required to note the condition of all important items so as to provide sufficient information for the guidance of the signal engineer, as well as for this office, in determining the conditions; and he will insert on the form, in the column entitled "Conditions Per Cent.", the condition of the various groups at the time they were recorded on the form.

40. In case it is found practicable to determine the sizes and kinds of wire in cables, conduits, etc., the field inspector will be expected to satisfy himself as to each item. If, however, he finds it impracticable to satisfy himself in this regard without cutting the cables or disturbing the conduits, etc., he will make note of this fact in his report so that this information may be obtained through other sources.

PREMIUM SYSTEM.

The duties of the field force in charge of the assistant engineer are of such nature as to put upon the engineer in charge the burden of determining a great many matters of importance; and,

while the chief engineer will make frequent visits with the field parties, it is highly important that as much ground be covered as is consistent with the character of work called for in the general instructions furnished each field party.

Owing to the very great difference in the size and the value of the property owned by the several railroad corporations in this state, it is not practicable to determine the efficiency of the field party by the number of miles covered each day; and it will be the policy of this office to carefully consider the character and quality of the field notes transmitted by the field party each day, in connection with the progress of the party.

It is manifestly difficult to organize a comprehensive and fair premium system in connection with a temporary organization and, owing to the large difference in the character of the properties to be surveyed and inventoried, the award of any premium must necessarily lie largely with the chief enginer and his office force, who compile and compute the field notes.

In order that each party may feel that its work is carefully noted and appreciated, it will be understood that the field party showing the best result for the month of July and for each month thereafter will receive, in addition to its monthly compensation, the sum of thirty dollars, in cash, to be divided as follows: To the assistant engineer, fifteen dollars; to the field assistant, ten dollars. The assistant engineer and the field engineer shall determine which of the two senior chainmen has, in their opinion, performed the more efficient service during the month; and to him will be paid the sum of five dollars, in cash, in addition to his monthly compensation. In case the assistant engineer and the field engineer cannot agree as to which of the two senior chainmen has shown himself the more efficient, they shall refer the matter to the chief engineer.

CONCLUSION.

It is manifestly impracticable to attempt to instruct the employees of this department in all the minute details attendant upon the work.

Each employee is charged with the duty of being diligent, careful and courteous; and he is expected to work for the State in the same earnest manner as if he were at all times under our immediate supervision.

The work of surveying, inventorying and valuing the property of all the railroads and canals of this state is of vast importance to all concerned; and it is our duty to bend every effort toward its intelligent, honest and speedy accomplishment.

Work must be unbiased. While the State pays the cost of this investigation, we must not lean toward any more than away from the interest of the State.

Field parties are required to work six full days each week and, while we will not measure efficiency by the number of hours worked each day, we expect full time to be given to the work.

WE DESIRE TO CALL SPECIAL ATTENTION TO SECTION 7, "SAFETY PRECAUTIONS," AND TO SECTION 8, "NO PUBLICITY ALLOWED."

The assistant engineer, who is the chief of the field party, is required to notify this office, in writing, to the effect that he has read these instructions to the members of his party and that they are understood; further, that each member accepts service under this department with full knowledge of his duty and obligations.

CHARLES HANSEL,
Expert in Charge.
LOUIS FOCHT,
Chief Engineer.

APPENDIX A.

CLASSIFICATION OF MASONRY IN ACCORDANCE WITH THE REPORT OF COMMITTEE OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.

(See "Transactions," Vol. VI., p. 303.)

RUBBLE MASONRY.

1. Rubble masonry is composed of unsquared stones. It may be uncoursed rubble (Fig. 26), laid without any attempt at regular courses, or coursed rubble (Fig. 27), levelled off at specified heights to a horizontal surface. The stone may be required to be roughly shaped with the hammer so as to fit approximately.

SQUARE STONE MASONRY.

2. According to the character of the face, square stone masonry is classified as "quarry-faced" (Fig. 28), or as "pitch-faced" (Fig. 29). If laid in regular courses of about the same rise throughout, it is "Range Work" (Fig. 30). If laid in courses that are not continuous throughout the length of the wall, it is "broken-range work" (Fig. 31). If not laid in course at all, it is "random work" (Fig. 32); and this is what is generally to be expected of this kind of masonry, unless the specifications call for range work.

In quarry-faced and pitch-faced masonry, quoins and sides of openings are usually hammer-dressed. This consists in removing projections so as to secure a rough-smooth surface and is done with the face hammer, the plain axe or the tooth axe. This work is a necessity where door or window frames are inserted; and it greatly improves the general effect of the wall if used wherever a corner is turned.

ASHLAR MASONRY.

3. Ashlar masonry is equivalent to cut-stone masonry or masonry composed of any of the various kinds of cut stone mentioned above. As a rule, the courses are continuous (Fig. 33) but sometimes are broken by the introduction of smaller stones of the same kind; and this is called "broken ashlar" (Fig. 34). If the stones are less than one foot in height, the term "smaller ashlar" is proper. The term "rough ashlar" is sometimes given to squared-stone masonry, either quarry-faced or pitch-faced, when laid as range work; but it is believed that it is more logical and more expressive to call such masonry "squared-range work." From its deriviation, ashlar apparently means large, square blocks, but practice seems to have made it synonymous with cut stone; and this secondary meaning has been retained for convenience.

Dimension stones are cut stones all of whose dimensions have been fixed in advance. If the specifications for ashlar masonry are so written as to prescribe the dimensions to be used, it will not be necessary to make a new class of such stones.

Range work, whether of squared stones or of ashlar, is usually backed up with rubble masonry; which, in such cases, is specified as "coursed rubble."

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Statement of Mileage of First Track, History, Capital Stock and Funded Debt of Railroads in New Jersey. January 1st, 1911.

PENNSYLVANIA RAILROAD SYSTEM.

Total Miles	Railroad, ...	758.529
" "	Canal and Feeders, ...	66.184
" "	of Route, ...	824.713

Miles.

THE BARNEGAT RAILROAD COMPANY, ... 8.129

The road extends from 3,186 feet east of Barnegat City Junction, N. J., to Barnegat City, N. J. Road is operated by the Tuckerton Railroad Company, for and on account of the Barnegat Railroad Company, and the latter road bears all expenses therewith. This arrangement is subject to termination on three months' notice.

BELVIDERE AND DELAWARE RAILROAD COMPANY, ... 79.796

Chartered March 2d, 1836. Completed November 5th, 1855. Extends from Trenton to Manunka Chunk, with various branches. Leased to New Jersey Railroad and Canal Company January 1st, 1876, for 904 years. Lease assigned to Pennsylvania Railroad Company March 7th, 1876. Capital stock, $1,253,000. Funded debt, $2,722,000. Main Line, 66.648 miles.

BRANCH LINES.

Enterprise Branch; from D. & R. Canal to Mulberry Avenue, Trenton, 1.647 miles.

Flemington Branch; from Lambertville to Flemington, 11.373 miles.

Martin's Creek Branch; from a point on Belvidere and Delaware Railroad, near Martin's Creek Station, to a point in the Delaware River in the dividing line between New Jersey and Pennsylvania, 0.128 mile.

CAMDEN AND BURLINGTON COUNTY RAILROAD COMPANY, ... 29.649

Pavonia to Pemberton, N. J. Chartered March 15th, 1859. Leased to Camden and Amboy Railroad Company April 24th, 1868, for term of its corporate existence; sub-leased to Pennsylvania Railroad Company. Capital stock, $381.925. Funded debt, $350,000.

Legislative Acts.

Burlington and Mount Holly Railroad and Transportation Company, incorporated 1848. Corporate name changed to Burlington County Railroad Company, 1857. Consolidation of the Burlington County Railroad and the Camden, Moorestown, Hainesport and Mount Holly Horse Car Railroad, under the name of Camden and Burlington County Railroad Company in 1866. Road extends from Camden Junction to Pemberton, Burlington and Mount Holly Branch: From Burlington to Mount Holly, 7.050 miles. Total length, including branch, 29.649 miles.

Miles.

Delaware River Railroad and Bridge Company, ... 7.789
Frankfort Junction, Pa., to Pensauken, N. J., and branches. Chartered March 17th, 1896. Consolidation of Pennsylvania and New Jersey Railroad Company, of Pennsylvania, and the Pennsylvania and New Jersey Railroad Company of New Jersey. Capital stock, $1,300,000. Funded debt, $1,300,000.

Freehold and Jamesburg Agricultural Railroad, ... 27.516
Jamesburg to Sea Girt, N. J. Chartered June 20th, 1852. Consolidation April 24th, 1879, with the Farmingdale and Squan Village Railroad and the Squankum and Freehold Railroad. Leased to Pennsylvania Railroad Company June 1st, 1879. Capital stock, $295,600. Funded debt, $498,600.

Legislative Acts.

Chartered 1851. Construction of additional road from Freehold to Toms River, and branch to marl pits, authorized 1852. Extension of road from Dean's Pond to Six Mile Run, authorized in 1853. Construction of branch road from Freehold to Farmingdale and branches, authorized in 1857. Sale of that portion of road lying between Monmouth Junction and Jamesburg to United New Jersey Railroad and Canal Company, authorized in 1874; also, consolidation of certain corporations with the United New Jersey Railroad and Canal Company, authorized in 1874.

Harrison and East Newark Railroad Company, ... 0.199

Kinkora and New Lisbon Railroad Company, ... 10.452
Kinkora to near Lewistown, N. J. Reorganization March 28th, 1903, of the Columbus, Kinkora and Springfield Railroad Company. Operated under an agreement dated March 11th, 1903, with the Pennsylvania Railroad, terminable upon thirty days' written notice. Rental, net earnings, stock $40,000. No bonds. Total deficit for year ending December 31st, 1908, $19,188.

Miles.

MILLSTONE AND NEW BRUNSWICK RAILROAD COMPANY, ... 6.558
New Brunswick station to East Millstone, N. J., chartered February 27th, 1837. Road opened December 20th, 1854. Operated by Pennsylvania Railroad under agreement, terminable in thirty days. Capital stock $95,750. No funded debt.

MOUNT HOLLY, LUMBERTON AND MEDFORD RAILROAD, ... 6.248
Mount Holly to Medford, N. J. Chartered April 2d, 1866. Leased to Pennsylvaina Railroad April 10th, 1873, for term of corporate existence. Stock $95,650. Funded debt $75,000.

NEW YORK BAY RAILROAD COMPANY, ... 13.599
Capital stock $6,000,000. Funded debt $3,885,000. Waverly Station to Bulkhead Line at Greenville, transfer bridges and branches.

PENNSYLVANIA TUNNEL AND TERMINAL COMPANY, ... 7.314
Chartered June 26th, 1907, under laws of New York and New Jersey. The electric division of the Pennsylvania System, from Harrison, Hudson County to Long Island City. Capital $40,000,000. Unfunded debt $82,563,591.

PERTH AMBOY AND WOODBRIDGE RAILROAD COMPANY, ... 6.784
Perth Amboy Junction, near Rahway, to Perth Amboy. Chartered March 9th, 1855. Opened October 11th, 1864. Operated by Pennsylvania Railroad by agreement. Terminable on thirty days' notice. Capital stock $228,400. No funded debt.

PHILADELPHIA AND BEACH HAVEN RAILROAD COMPANY, ... 13.344
Manhawkin to Beach Haven. Organized Long Branch Railroad Company October 23d, 1883. Sold under foreclosure November 28th, 1893. Reorganized under present title. Leased to Pennsylvania Railroad. Rental net earnings. Capital $200,000. No funded debt.

PHILADELPHIA AND LONG BRANCH RAILROAD COMPANY, ... 48.958
Birmingham to Bay Head Junction and branches. Consolidation of the Philadelphia and Long Branch Railroad and the Pemberton Seashore Railroad November 3d, 1883. The Island Heights Railroad was taken in June, 1885. Leased to the Pennsylvania Railroad for 50 years beginning January 1st, 1884. Rental net earnings. Stock $765,000. Funded debt $750,000.

Incorporated September 24th, 1880, under the General Railroad Act of April 2d, 1873. Road extends from Pemberton Junction, at intersection with the Pemberton and Hightstown Railroad and Camden and Burlington County Railroad, to head of Barnegat Bay (Bay Head). 45.753 miles.

BRANCH LINES.

Brown's Mills Branch. 1,951 miles.
Island Heights Branch; from Island Heights Junction to Island Heights (on Toms River) 1.244 miles.

Miles.

ROCKY HILL RAILROAD AND TRANSPORTATION COMPANY, ... 2.873
Incorporated 1853. Rocky Hill to Kingston, N. J., Road opened 1864. Leased to Pennsylvania Railroad in perpetuity. Rental net earnings. Stock $45,600. No funded debt.

LEGISLATIVE ACTS.

Road extends from Rocky Hill to Kingston at intersection of Kingston Branch of United New Jersey Railroad.

UNITED NEW JERSEY RAILROAD AND CANAL COMPANY. (Railroad only) 149.125
Jersey City to Trenton. South Amboy to Camden. Canal owned. Bordentown to New Brunswick and feeder 66 miles. February, 1831, an act was passed to consolidate stocks of the Delaware and Raritan Canal Company and the Camden and Amboy Railroad. Main line Railroad and Canal completed in 1834; branch 1838. In 1836, the joint companies acquired controlling interest in the stock of the Philadelphia and Trenton Railroad Company. All of these companies agreed to an equal division of joint profits. January, 1867, the United Companies took in the New Jersey Railroad, which owned the line from New Brunswick to Jersey City. The profits were then divided among the four companies. On June 30th, 1871, the entire property was leased to the Pennsylvania Railroad for 999 years; which company agreed to pay an annual rental equal to ten per cent. on the aggregate capital stock, and the same rate to the Philadelphia and Trenton. The lessee assumed all obligations. Therefore, the consolidated companies received ten per cent. net on the capital stock, $21,240,400. The funded debt is $20,000,000.

DELAWARE AND RARITAN CANAL.
Main waterway extends from Bordentown City to New Brunswick City. Feeder extends from junction with main canal at Trenton City to Delaware River at Raven Rock. See summary for length of canal.

VINCENTOWN BRANCH RAILROAD COMPANY, ... 2.892
Incorporated in 1861. Ewansville to Vincentown. Leased June, 1868, to Camden and Amboy Railroad. Operated by Pennsylvania Railroad. Rental six per cent. on $15,000 of the capital stock and taxes. Capital stock $25,000. Funded debt $15,000.

		Miles.
West Jersey and Seashore Railroad Company, ...		337.304
Philadelphia to Cape May, Atlantic City & Branches. Consolidation of the West Jersey Railroad Company, the Alloway and Quinton Railroad, the West Jersey and Atlantic Railroad, the Camden and Atlantic Railroad, the Chelsea Branch Railroad Company and the Philadelphia, Marlton and Medford Railroad Company in 1896. The Delaware River Railroad was absorbed in 1900. While this railroad is included in the Pennsylvania System in New Jersey, it is separately operated and makes separate, annual statements. The total mileage of the Pennsylvania Railroad Company of New Jersey, including the West Jersey and Seashore and the Pennsylvania Tunnel and Terminal Railroad Company and the Delaware and Raritan Canal.		
Delaware and Raritan Canal.		
Main Canal extending from Bordentown City to New Brunswick City, ...	43.457	
Canal feeder extending from Junction with main canal at Trenton to Delaware River at Raven Rock, ...	22.727	
		66.184
Total miles first track, ...		758.529
Total miles route Railroad and Canal, ...		824.713

CENTRAL RAILROAD OF NEW JERSEY SYSTEM.

Total Miles of Route, ...	443.735	
Buena Vista Railroad, ...		1.123
Greenwich to Cohansey, N. J. Capital $21,400.		
Carteret Extension Railroad, ...		1.770
Carteret, N. J., to Staten Island Sound. Capital $23,600.		
Carteret and Sewaren Railroad, ...		1.238
Siebig's to Port Reading Railroad. Capital $24,800.		
Central Railroad of New Jersey, ...		158.647
Central R. R. of N. J. Main Line,.	72.306	
Henderson Street Branch, ...	.421	
Jersey Avenue Branch, ...	.547	
Phillip Street Branch, ...	.991	
Port Johnson Spur, ...	.294	
Branch to Insulated Wire & Cable Co., ...	.543	
West Second Street Branch, ...	.577	
Elizabeth Loop Line, ...	2.716	
Newark and New York Branch, ...	6.229	

	Miles.
Passaic Zinc Works Spur,	.618
Manufacturers' Branch,	1.061
Elizabeth & Perth Amboy Branch,	12.336
Newark & Elizabeth Branch,	5.717
Constables' Hook Branch,	2.147
South Branch,	15.728
High Bridge Branch,	15.031
Br. to Ingersol Sergeant Drill Co.,	.703
Mount Olive Branch,	2.628
Longwood Valley Branch,	10.948
Lake Hopatcong Branch,	5.517
Feigenspan Branch,	.339
Chester Hill Branch,	1.250

Consolidation February 22d, 1849, of the Elizabeth & Somerville Railroad and the Somerville & Easton Railroad. Controlled by the Reading Company, through ownership of a majority of stock (Capital), which is $27,436,800. Funded debt $52,851,000.

Legislative Acts.

Elizabethtown and Somerville Railroad chartered in 1831. Somerville and Easton Railroad chartered in 1847. Central Railroad of New Jersey chartered in 1849. Extension of road from Elizabeth to Jersey City and construction of drawbridges, etc., authorized in 1860. Road extends from Jersey City to Phillipsburg.

Branch Lines.

Newark and New York Branch; from Communipaw to Newark.

Constables' Hook Branch; from Centreville to Constables' Hook.

Port Johnson Spur; from Main Line at Bayonne City to coal docks at Port Johnson. Entirely within the taxing district of Bayonne City.

Elizabeth Loop Line. Entirely within the taxing district of Elizabeth City.

Elizabethport and Perth Amboy Branch; Elizabethport to Perth Amboy.

Bay Way Extension; from a point on the Elizabethport and Perth Amboy Branch, in the taxing district of Elizabeth City, to tidewater.

Newark and Elizabeth Branch; from Newark to Elizabeth.

Manufacturers' Branch; from Brille, on line of Newark and New York Branch, to the Passaic River. Entirely within the taxing district of Newark City.

High Bridge Branch; from a point on main line at High Bridge to German Valley.

Mount Olive Branch; running through the taxing districts of Washington and Chester Townships.

Chester Hill Branch. Entirely within the taxing district of Chester Township.

Longwood Valley Branch; from German Valley to Port Oram.

Lake Hopatcong Branch; from Kenvil to Nolan's Point at Lake Hopatcong.

	Miles.
CUMBERLAND AND MAURICE RIVER RAILROAD, ...	21.347

Capital Stock $252,900. Incorporated January 28th, 1879. Road extends from Bridgeton to Maurice River, on Delaware Bay.

CUMBERLAND AND MAURICE RIVER EXTENSION RAILROAD, ...	1.967

Capital Stock $16,200. Bridgeton Junction to Bivalve, N. J. Incorporated January 13th, 1887. Road extends from a point on the Vineland Railroad near Bridgeton to Cumberland and Maurice River Railroad.

DOVER AND ROCKAWAY RAILROAD, ...	4.637

Wharton to Rockaway. Chartered March 8th, 1880; opened 1881 as a continuation of High Bridge Railroad. Lease guaranteed by Central Railroad of New Jersey, for 999 years, April 26th, 1881. Capital Stock $140,000. Funded debt $35,000.

ELIZABETH EXTENSION RAILROAD, ...	1.653

Great Island Junction to terminus. Capital $30,000.

FREEHOLD AND ATLANTIC HIGHLANDS RAILROAD COMPANY (Main Track), ...	22.669
Branch to New York & Long Branch R. R., ...	.325
Branch to Keyport Dock, ...	.307
Branch to Hopping Station, ...	.353
Branch to Stone Church, ...	2.129
	25.783

Freehold to Atlantic Highlands; Atlantic Highlands to Stone Church. Capital Stock $650,000.

HIBERNIA MINE RAILROAD, Main Track, ...	4.441

Branch to Beach Glen Mine.

Rockaway to Hibernia. Capital $200,000.

LAFAYETTE RAILROAD COMPANY, ...	.559

Runs from Lafayette to Griffing Iron Works. Capital stock $61,800.

		Miles.
Manufacturers' Extension Railroad, Main Track, ...	.994	
Branch to Baeder Adamson & Company Works, ...	.305	
		1.299

Middle Brook Railroad Company, ... 1.928
Middle Brook to Chimney Rock. Capital Stock $4,000.

Middle Valley Railroad Company, ... 1.347
Middle Valley to Quarry. Capital $9,900.

Navesink Railroad Company, Main Track, ...	3.965	
Branch to Freehold & Atlantic Highlands Railroad, including "Y" connection.....	.531	
		4.496

Atlantic Highlands to Highland Beach. Capital stock $701,900.

New Jersey Southern Railroad Company.

Main Line	63.336	
Atco Branch	.750	
East Long Branch & Eatontown Branch.....	5.160	
Long Branch & Sea Shore Division.....	6.238	
		75.484

Capital stock $2,590,600. Raritan & Delaware Bay Railroad chartered in 1854. Name changed 1870 to New Jersey Southern Railroad. Same year consolidated with the Long Branch & Sea Shore Railroad.

Legislative Acts.

Road extends from Port Monmouth to Atsion.

Branch Lines.

Atco Branch. From Atsion to Atco.
Long Branch & Seashore Division. From Sandy Hook to East Long Branch.

New Jersey Terminal Railroad Company.

Main Line	4.803	
Branch No. 2, to Tuft's Point	.731	
		5.534

Carteret to Pennsylvania Railroad. Carteret to American Agricultural Chemical Works. Capital stock $500,000. Funded debt $250,000.

Miles.

NEW YORK AND LONG BRANCH RAILROAD, ... 37.799
Perth Amboy to Bay Head. Consolidation, December 21st, 1881, of the New York & Long Branch, the New Egypt & Farmingdale, the Long Branch & Sea Girt, the New York & Long Branch Extension and the Barnegat Bay Railroads. Leased to the C. R. R. of N. J. and the Penn. R. R. jointly for 99 years, from January 2d, 1888. Rental, interest on bonds, 7 per cent. on stock (all owned by C. R. R. of N. J.) and $6,000 for expenses of organization. Operated under independent management. Capital stock $2,000,000. Funded debt $2,438,000. Incorporated 1868. Connects with Philadelphia & Long Branch R. R. at Bay Head Junction.

OGDEN MINE RAILROAD COMPANY, Main Line..... 9.693
Heckscher & Copley Branch..... .463
—— 10.156

Chartered February 19th, 1864. Leased November 4th, 1881, to the C. R. R. of N. J. for 999 years, from January 1st, 1882. Rental 5 per cent. on the stock $450,000, and $500 for organization expenses. Nolan's Point to Edison. Cost of road $450,000.

LEGISLATIVE ACTS.

Road extends from Ogden Mine, Sparta Township, to Nolan's Point, Jefferson Township.

RARITAN NORTH SHORE RAILROAD, ... 1.715
Perth Amboy to Raritan Brick Works. Capital $66,400.

SOUND SHORE RAILROAD, Main Line..... 4.199
Branch No. 1..... .350
Branch No. 2..... .280
Branch No. 3..... .681
Branch No. 4..... .086
—— 5.596

Broadway, Elizabeth, to Carteret; including Bayway and Tremley Spurs. Capital stock $149,200.

TOMS RIVER RAILROAD COMPANY, ... 7.496
Lakehurst to Toms River. Capital stock $240,000. Incorporated September 20th, 1881. Road extends from Manchester, on line of New Jersey Southern Railway to Toms River, connecting with the Toms River & Waretown Railroad.

TOMS RIVER AND BARNEGAT RAILROAD COMPANY, ... 14.713
Toms River to Barnegat. Capital stock $75,300. Toms River & Waretown Railroad incorporated 1870. Extends from Toms River at intersection with the Toms River R. R., through Forked River & Waretown, to Barnegat.

		Miles.
VINELAND RAILROAD COMPANY, Main Line.....	46.871	
Branch to Bridgeton Station.....	.227	
		47.098

Atsion to Bay Side. Capital Stock $600,000.

VINELAND BRANCH RAILROAD. Capital $8,000, ...	3.615

LEGISLATIVE ACTS.

Incorporated 1867. On line of New Jersey Southern Railway.

WEST END RAILROAD COMPANY, ...	1.435

Incorporated April 29th, 1878. Long Branch to West End. Capital stock $43,700.

WEST SIDE CONNECTING RAILROAD COMPANY, ...	.859

West Side Avenue to Danforth Avenue. Capital stock $125,400.

Total Miles First Track, ...	443.735

PHILADELPHIA AND READING RAILWAY SYSTEM.

Total Miles of Route, ...	229.843.	
ATLANTIC CITY RAILROAD COMPANY, Main Line, ...	55.914	
Gloucester & Mt. Ephriam Branch, ...	10.916	
Williamstown & Delaware River Branch, ...	22.434	
Glassboro, ...	.336	
Baltic Avenue, ...	1.226	
Sea Island City, ...	40.298	
Ocean City, ...	10.085	
Cape May, ...	26.819	
		168.028

Consolidation May 24th, 1901, of the Atlantic City Railroad Company, the Camden County Railroad Company, the Sea Coast Railroad Company, and the Ocean City Railroad Company. Capital stock $3,625,000. Funded debt $4,500,000.

CAPE MAY, DELAWARE BAY & SEWELL'S POINT RAILROAD.		
Main line, ...	6.205	
Branch to West Jersey & Seashore R. R., ...	.720	
		6.925

Incorporated September 3d, 1880. Chartered January 19th, 1893, when it consolidated with the Delaware Bay and Cape May Railroad, which was incorporated April 12th, 1879, and the Cape May and Schellinger's Landing Railroad, incorporated May 23d, 1881. Road was electrified in 1891, for passenger service. Reading Co. acquired control in 1901. Capital stock $150,000. Funded debt $150,000. Cape May Point to Sewell's Point.

Miles.

DELAWARE AND BOUND BROOK RAILROAD COMPANY.

Main Line,	27.040	
Trenton Branch, opened 1877,	3.829	
		30.869

Chartered May 12th, 1874. Opened May 1st, 1876. Bound Brook Junction to Delaware River, Trenton Junction to Trenton. Leased to Philadelphia and Reading Railroad May 12th, 1879, for 990 years. Eight per cent. on capital stock. Capital stock $1,800,000. Funded debt $1,800,000. Road extends from the middle of the Delaware River to Bound Brook.

BRANCH LINES.

Trenton Branch. From Trenton Junction on main line to Trenton City.

EAST TRENTON RAILROAD COMPANY, ... 2.975

Millham to terminus, Trenton. Controlled by the Delaware and Bound Brook Railroad Company. Capital stock $59,000, representing cost of road. Incorporated April 17th, 1884, under the General Railroad Act of April 2d, 1873. Road extends from a point in the Trenton Branch of the Delaware and Bound Brook Railroad to a point in Millham.

PORT READING RAILROAD COMPANY.

Port Reading Jct. to Port Reading, main line, ...	19.609	
Woodbridge Branch, ...	1.437	
		21.046

Chartered November 5th, 1890. One road completed September, 1892. Controlled by Reading Company through ownership of the entire capital stock, $2,000,000. Funded debt $1,500,000.

ERIE RAILROAD COMPANY SYSTEM.

Total Miles of Route, ... 159.552

ARLINGTON RAILROAD COMPANY, ... .976

Double track. Extends from Newark Junction to New York and Greenwood Lake Junction, N. J. Entire capital $4,000; owned by Erie Railroad.

BERGEN COUNTY RAILROAD COMPANY, ... 9.741

Rutherford Junction to Ridgewood Junction. Double track. Organized September 9th, 1880. Capital stock $200,000. 6 per cent. bonds $200,000. Erie owns entire capital stock, which is deposited as security for its first consolidated mort-

gage. Funded debt $200,000. Extends from Rutherford, on line of Paterson and Hudson R. R. R., to Ridgewood, on line of Paterson and Ramapo R. R.
Dundee Spur. From Garfield to Passaic City.

Miles.

BERGEN AND DUNDEE RAILROAD COMPANY, ... 1.875
Incorporated July 8th, 1885. Garfield to Passaic. Capital $40,000; owned by Erie and deposited as security for first consolidated mortgage.

CALDWELL RAILWAY COMPANY, ... 4.543
Capital $47,800; owned by New York and Greenwood Lake Company. Leased to the Erie for 999 years from May 1st, 1896.

DOCKS CONNECTING RAILWAY COMPANY, ... .278
Capital, $9,000. Owner by the Erie.

ERIE TERMINAL RAILROAD COMPINY, ... 1.768
At Edgewater, N. J. Capital, $68,000. Leased by New York, Susquehanna & Western Railroad, which is controlled by the Erie.

LONG DOCK COMPANY, ... 2.802
Double track. Chartered in New Jersey February 26th, 1856, with power to hold and improve land, build docks, piers and railroads. Assets consist of 577 acres of land improved with buildings, piers, docks, etc., worth, according to 1905 assessment, $6,931,023. Capital stock, $800,000. Funded debt, $7,500,000. Both owned by Erie Railroad.
Road extends from Seventeenth Street (Pavonia Ferry), Jersey City, to intersection with Paterson & Hudson River Railroad at West End, Bergen Junction, Jersey City.

NEWARK AND HUDSON RAILROAD, ... 7.879
Chartered March 17th, 1870; opened 1871. Capital stock, $250,000. Funded debt, $250,000. First mortgage 7 per cent. of 1901 stock and bonds deposited as security for Erie Railroad first consolidated mortgage bonds. Road extends from Bergen Junction, in Jersey City, to Newark, connecting with the Paterson, Newark and New York Railroad.

NEW JERSEY & NEW YORK RAILROAD COMPANY, ... 17.523
Incorporated under the laws of the State of New Jersey and the State of New York. Consolidation in December, 1885, of a company of the same name with the Hackensack Railroad Company. The Erie, having secured control, took possession April 7th, 1896, but operates it separately.
New Jersey and New York Junction, N. J., to Nanuet Junction, N. Y.

Spring Valley to Garnersville, N. Y.
Stoney Point Junction to Strong Point, N. Y.
New City Junction to New City, N. Y.

LEGISLATIVE ACTS.

Hackensack & New York Railroad incorporated 1856. Title of Trustees changed to "The Hackensack and New York Extension Railroad," in 1869. Construction of a branch from Hillsdale to New York Line authorized in 1872. Merging and consolidation of the Hackensack and New York Railroad and the Hackensack and New York Extension under the title of "New Jersey and New York Railroad Company," in 1873. Road extends from a point on line of Paterson and Hudson River Railroad, near Rutherford, to the New York State line.

Miles.

NEW YORK AND GREENWOOD LAKE RAILROAD COMPANY.

Main Line,	41.312	
Ringwood Branch,	2.529	
		43.841

Successor, November 1st, 1878, to the Montclair and Greenwood Lake Railroad. Leased to the Erie on May 1st, 1896, for 999 years, at a rental equal to fixed charges. New York and Greenwood Lake Junction to Sterling Forest, N. J. Ringwood Junction to Ringwood, Caldwell Railway, Roseland Railway, Watchung Railway. Capital stock $100,000. Funded debt $1,471,600. Guaranteed principal and interest by Erie Railroad. Erie Railroad Company, lessee.

LEGISLATIVE ACTS.

Montclair Railway Company chartered 1867.

Act amended in 1873 to enable the Montclair Railway to consolidate with the Watchung Railway, the Hudson Connecting Railway and the New Jersey Midland Railroad.

The Montclair Railway was sold under foreclosure and reorganized as per certificate filed October 30th, 1875, as the Montclair & Greenwood Lake Railway Company. This was subsequently sold under foreclosure and reorganized by certificate filed November 1st, 1878, as the New York and Greenwood Lake Railway Company.

NEW YORK, LAKE ERIE & WESTERN DOCKS IMPROVEMENT COMPANY, ... .505

Organized June 28th, 1881, for the purpose of buying and reclaiming lands in Hudson County. Capital stock $604,000. Funded debt $4,000,000. Both owned by Erie Railroad.

Miles.

NORTHERN RAILROAD OF NEW JERSEY, ... 19.858
Chartered February 9th, 1854. Opened October 1st, 1859. Leased to the Erie Railroad, which agreed to pay dividends of 4 per cent. a year on capital stock of $1,000,000. Funded debt $808,000. Bergen Junction, N. J., to Sparkill, N. Y. Lease Nyack and Southern Railroad, Sparkill to Nyack, N. Y.

PATERSON & HUDSON RIVER RAILROAD, ... 13.966
Chartered January 31st, 1831. Opened 1834. Lessee, Erie Railroad Company. Leased in perpetuity to that company from September 9th, 1852, at an annual rental of $48,400. Capital stock $630,000. Jersey City to Paterson.

PATERSON, NEWARK & NEW YORK RAILROAD, ... 10.780
Incorporated 1864. Chartered January 16th, 1872. Paterson to Newark. Owned by Erie Railroad. Capital stock $250,000. Funded debt $500,000.

PATERSON & RAMAPO RAILROAD, ... 14.431
Erie Railroad, lessee. Paterson to New York State Line. Chartered March 10th, 1841. Opened 1842. Leased in perpetuity September 10th, 1852, to the Erie Railroad at a rental of $26,500. Dividends 8 per cent. per annum. Capital $298,000, representing cost of road.

PENHORN CREEK RAILROAD, ... 3.175
Penhorn Creek ranch "A", ... .461
3.636
Extends from Newark & Hudson Junction, Jersey City, to Fish Creek, N. J.

ROSELAND RAILWAY, ... 1.044
Run by the New York & Grenwood Lake Railroad, which is owned by the Erie Railroad. Capital stock, $2,000. Caldwell to Essex Fells.

WATCHUNG RAILROAD COMPANY, ... 4.106
Incorporated 1870. Successor Bloomfield and Orange Horse-Car Railroad. Run by the New York & Greenwood Lake Railroad, which is owned by the Erie Railroad. Capital stock $47,000. Funded debt $200,000. Road extends from a junction with New York & Greenwood Lake Railroad, near Newark, to East Orange.

Total Miles, First Track, ... 159.552

DELAWARE, LACKAWANNA AND WESTERN RAILROAD SYSTEM.

Total Miles of Route, 208.071.

Miles.

CHESTER RAILROAD COMPANY, ... 9.981

Dover to Chester. Chartered 1867. Opened 1872. Leased to Morris and Essex Railroad for 4 per cent. on bonds. Capital stock $100,534. Floating debt $127,655.

HOPATCONG RAILWAY COMPANY, ... 1,624

Junction with Morris & Essex Railroad, near Hopatcong, to works of the American Forcite Powder Manufacturing Company, Roxbury. Acquired by the Delaware, Lackawanna & Western Railroad, August 16th, 1892, by purchase of its stocks, $10,000.

MORRIS & ESSEX RAILROAD, Main Line, ... 83.812 miles
Boonton Branch, ... 34.239 "

118.051

Hoboken to Phillipsburg, Denville to West End Tunnel. Chartered January 29th, 1853. Opened to Hackettstown January, 1854. Opened to Phillipsburg in 1866. Tunnel completed in 1876. Leased in perpetuity to the Delaware, Lackawanna & Western Railroad, the lessee assuming all liabilities and agreeing to pay seven per cent. per annum on the capital stock, $15,000,000, and interest on the bonds. Funded debt $32,077,000.

LEGISLATIVE ACTS.

Act to perfect junction with New Jersey Railroad 1853. Act to build bridge across Delaware at Phillipsburg, 1865. Act to validate and confirm lease to Delaware, Lackawanna & Western Railroad 1869.

BRANCH LINES.

Boonton Branch. Jersey City to Rockaway.

MORRIS & ESSEX EXTENSION RAILROAD COMPANY, ... 1.885

Junction with Morris & Essex to Paterson. Chartered May 1889. Operated by the Delaware, Lackawanna & Western Railroad as lessee of the Morris & Essex Railroad under an agreement dated May 6th, 1889, to pay 4 per cent. on its stock, $221,000. Floating debt, December 31st, 1897, $73,254.

Miles.

NEWARK & BLOOMFIELD RAILROAD COMPANY, ... 4.194

Newark Junction to Montclair. Chartered March 26th, 1852. Opened July 1st, 1856. Leased to Delaware, Lackawanna & Western Railroad April 1st, 1868, for 99 years, at an annual rental of 6 per cent. on capital stock, $103,850, of which the Delaware, Lackawanna & Western owns $97,700. Floating debt, December 31st, 1908, $459,144. Road extends from Roseville Junction, on line of Boonton Branch of Morris & Essex Railroad to Montclair.

PASSAIC & DELAWARE RAILROAD COMPANY, ... 13.814

Summit & Bernardsville. Organized October 29th, 1878, as successor of the New Jersey West Line Railroad Company. Leased for term of corporate existence November 1st, 1882, to the Delaware, Lackawanna & Western Railroad, at a yearly rental of 5 per cent. on capital stock, $111,050, of which the lessee owns $109,350. Floating debt due lessee, $32,435.

PASSAIC & DELAWARE EXTENSION RAILROAD COMPANY, ... 7.406

Junction with Passaic & Delaware Railroad at Bernardsville to Gladstone. Chartered April, 1890. Opened September, 1890. Operated by the Delaware, Lackawanna & Western Railroad as lessee under agreement dated May 1st, 1890, to pay 4 per cent. on its stock, $100,000.

ROCKAWAY RIVER & MONTVILLE RAILROAD COMPANY, ... 1.800

Capital $30,000. Operations included in report of Morris & Essex Railroad Company.

SUSSEX RAILROAD COMPANY, Main Line, ... 24.237 miles
Branchville Branch, ... 6.287 "
30.524

Junction with Morris & Essex Railroad near Stanhope, to Franklin, Lafayette to Branchville. Chartered February 5th, 1853. Main line opened December 11th, 1854. Capital stock $1,638,600.

LEGISLATIVE ACTS.

Incorporated as Sussex Mine Railroad in 1848. Title changed to "Sussex Railroad" in 1853. Extension of road to connect with Morris & Essex Railroad to Branchville Junction.

BRANCH LINES.

Cut-off to Newton. Branchville Branch; from Branchville Junction through Lafayette to Branchville.

Miles.

WARREN RAILROAD COMPANY, ... 18.792

New Hampton Junction to Delaware River. Chartered February 12th, 1851. Opened June, 1856. Leased October 1st, 1857, for term of corporate existence, to the Delaware, Lackawanna & Western Railroad. Annual Rental, 7 per cent. on capital stock, $1,800,000, and interest on bonds. Funded debt, $1,394,000. Road extends from Hampton Junction, on line of New Jersey Central Railroad, to the Delaware River, near Delaware, Knowlton Township, connecting with the New York, Susquehanna & Western Railroad.

Total miles of first track, ... 208.071

THE NEW YORK, SUSQUEHANNA & WESTERN RAILROAD SYSTEM IN NEW JERSEY.

Total Miles of Route, 127.028.

Miles.

HACKENSACK & LODI RAILROAD COMPANY, ... 1.340

Lodi Junction to Hackensack. Capital, $25,000. All owned by New York, Susquehanna & Western Railroad.

LODI BRANCH RAILROAD, ... .564

Lodi Junction to Lodi, 2 miles, of which .32 miles are in operation. Chartered June 15th, 1880. Capital stock, $60,000. All owned by the New York, Susquehanna & Western Railroad.

LEGISLATIVE ACTS.

Chartered 1870.

MACOPIN RAILROAD COMPANY, ... 1.573

Chartered November 8th, 1886. Capital stock, $60,000. Funded debt, $44,000. Both owned by the New York, Susquehanna & Western Railroad. Macopin Lake Junction to Macopin Lake. Road extends from a point of connection with the New York, Susquehanna & Western Railroad near Charlottsburgh, West Milford Township, to Macopin Lake.

NEW YORK, SUSQUEHANNA & WESTERN RAILROAD.

Main Line, ...	94.384	
Hudson River Terminal Branch, ...	2.916	
Paterson Branch, ...	.703	
Unionville "	19.368	
Delaware "	3.103	
		120.474

Incorporated by consolidation of the Midland Railroad Company of New Jersey, the Paterson Extension, the Midland Connecting Railway, the North Jersey Railroad Company, all of New Jersey; and the Water Gap Railroad Company, of Pennsylvania. Articles of agreement and consolidation under the name of the New York, Susquehanna & Western Railroad Company filed June 17th, 1881. Road extends from Marion (Jersey City), intersection of United New Jersey Railroad, to Gravel Place, Pa. Length to State Line, 94.009 miles. Length from Jersey City to Gravel Place, 101.20 miles.

BRANCH LINES.

Unionville Branch. From Two Bridges, N. J., to Unionville, N. Y., through the townships of Hardyston, Sparta and Wantage.

Delaware Branch. From Columbia Junction, N. J., to Delaware, N. J.; entirely within the township of Knowlton.

Paterson Branch. From main line to Passaic, entirely within the taxing district of Passaic City. Consolidated April 5th, 1893, with the Hudson River Railroad & Terminal Company. Owned by the Erie Railroad but operated as a separate company. Common stock $13,000,000. Preferred stock $13,000,000. Funded debt $15,613,000.

	Miles.
PASSAIC & NEW YORK RAILROAD COMPANY, ...	3.077

Passaic to Passaic Junction. Organized July 14th, 1885. Opened February 8th, 1886. Capital stock $70,000. All owned by the New York, Susquehanna & Western Railroad. Funded debt $70,000. Total cost of road $140,000.

Total Miles of First Track, ...	127.028

LEHIGH VALLEY RAILROAD SYSTEM IN NEW JERSEY.

Total Miles First Track Railroad 121.035.

BAY SHORE CONNECTING RAILROAD, ...	1.207

Capital stock $34,777; owned jointly by the Lehigh Valley Railroad and the Central Railroad of New Jersey. Operated independently. Spur.

LEHIGH VALLEY RAILROAD OF NEW JERSEY.

Main Line, ...	75.133
Andover Branch, ...	.553
Musconetcong Branch, ...	3.218
Pittstown "	4.089
Clinton "	2.020

	Miles.	Miles.
Flemington "	1.874	
Bloodgoods "	1.009	
Central Railroad of New Jersey Conn.,	1.069	
Irvington Branch,	2.962	
West Newark "	.903	
Newark & Passaic Branch,	1.040	
Edgewater "	1.001	
National Docks "	6.796	
" " and N. J. Junc. Branch,	.451	
Communipaw Branch,	.363	
National Storage Branch,	.286	
Kill von Kull "	.470	
Perth Amboy "	10.262	
Pennsylvania Railroad Connection,	.414	
Raritan Branch,	5.121	
Keasby's "	.482	
Weber "	.172	
Middlesex "	.140	
		119.828

Jersey City to Phillipsburg, N. J. The entire capital stock, $20,433,000, is deposited as collateral to the general consolidated mortgage of the Lehigh Valley Railroad, and provision is made in that mortgage for the retirement of the outstanding bonds. Funded debt $16,475,000.

Total Miles Railroad, First Track, ... 121.035

MORRIS CANAL & BANKING COMPANY, ... 108.760

Beginning at west side of arch, junction of canal with Delaware River at Phillipsburg, ending at end of pier 1,527' east of east side of Washington Street, Jersey City, Hudson County. Combination commenced 1827. Original canal completed 1831. Extension completed 1836. Company reorganized 1849. Capital, $10,250. Common shares, $11,750. Preferred shares all at $100 par value. Canal leased to Lehigh Valley Railroad Company in 1871 in perpetuity.

Main waterway of canal,	102.648
Lake Hopatcong feeder,	.695
Pompton feeder,	5.417

Total length of first track and canal, ... 229.795

RAILROADS NOT CLASSIFIED.

Total Miles First Track, 321.282.

ATLANTIC CITY & OCEAN CITY RAILROAD COMPANY, ... 2.624

Somers Point to Ocean City. Chartered March 19th, 1906, for 999 years. Organized April 17th, 1906. Opened July 1st, 1907. Leased to the Atlantic City & Shore Railroad. Capital stock, $180,000.

Miles.

ATLANTIC CITY & SHORE RAILROAD COMPANY, ... 2.231
Atlantic City to Meadows Tower. Charter runs 999 years from October 21st, 1905. Incorporated November 22d, 1905. Operated by single overhead and three-rail systems. The West Jersey & Seashore Railroad has an option to purchase, any time between May 1st, 1913, and May 1st, 1918, a majority of the capital stock ($1,000,000) of this company. Funded debt, $850,000.

BALTIMORE & NEW YORK RAILWAY COMPANY, ... 5.300
Capital stock, $350,000. Funded debt, $350,000. Virtually merged in the Baltimore & Ohio Railroad, which owns or guarantees their stock and bonds.

EAST JERSEY RAILROAD & TERMINAL COMPANY, ... .512
Lines leased: In Bayonne City, from Central Railroad of New Jersey to Pier No. 4, tracks are leased for 30 years from December 23d, 1901, from the Tide Water Oil Company. Incorporated January 13th, 1901, to build in a line from a point in Bayonne to Kill von Kull, about 2 miles. Capital stock, $82,000. (Authorized, $150,000.)

ELIZABETH & TRENTON RAILROAD, ... 23.102
Trenton to New Brunswick. Chartered May 19th, 1910. Capital stock $300,000. 5 P. C. cumulative preferred. $900,000 common. Successor to Trenton & New Brunswick and New Jersey Short Line.

FERRO MONTE RAILROAD COMPANY, ... 1.022
Capital stock, $30,000. Not operated during 1908. Not mentioned in Poor's Manual for 1909.

LEGISLATIVE ACTS.

Chartered 1869. Road extends from Vanatta Station to the Byram Mine.

HOBOKEN MANUFACTURERS' RAILROAD COMPANY, ... .062
Capital $400,000. Funded debt $350,000.

HOBOKEN RAILROAD WAREHOUSE & STEAMSHIP CONNECTING CO., 1.554
Main line, ... 1.347 miles
Branch No. 1, ... .167 "
Branch No. 2, ... .040 "
Capital $300,000. Funded debt $189,000. (Poor gives funded debt as $196,000.) Road opened 1897, solely for freight. Leased to the Hoboken Manufacturers' Railroad Company.

HOPATCONG SHORE RAILROAD, ... 1.147
Capital stock, $100,000. (Authorized $47,000.) Issued bonds authorized $9,000, 5 per cent.

Miles.

HUDSON & MANHATTAN RAILROAD COMPANY, ... 4.060
Incorporated December 5th, 1906, in New York and New Jersey, as a consolidation of the Hoboken and Manhattan Railroad Company of New Jersey, the New York & New Jersey Railroad Company of New York and the Hudson & Manhattan Railroad Company of New York; thus, becoming owner of all the tunnels, franchise and properties of these companies. Authorized capital stock: Common, $40,000,000; preferred, $10,000,000. Outstanding common stock, 39,994,890; preferred, $5,242,151. Funded debt, January 1st, 1911, $67,791,000. Car trust obligations $1,252,-000. Real estate mortgage $42,000.

HUDSON RAILROAD & TRANSPORTATION COMPANY, ... .265
Capital $2,000. Not mentioned in Poor's Manual, of 1909.

LEHIGH & HUDSON RIVER RAILWAY COMPANY, ... 48.154
Chartered April 1st, 1882. Consolidated May 23, 1907, with the Orange County Railroad Company. In 1889, entered into a 99 year contract with the Pennsylvania Railroad Company for the use of the Pennsylvania tracks between Belvidere and Phillipsburg; and, to the Pennsylvania, the use of this line to reach the Poughkeepsie Bridge. Capital stock, $1,340,000. Funded debt, $2,669,000. Incorporated January 6th, 1881, under the General Railroad Act of April 2d. Road extends from Belvidere to Greycourt, N. Y.

LEHIGH & NEW ENGLAND RAILROAD COMPANY, ... 23.582
Slatington, Pa., to Harrisburg Junction, N. J., Swartswood Junction, N. J., to Liberty Corner, N. Y.; Sussex Junction to Sussex, N. J. Organized April 2d, 1895, as successor to the Pennsylvania, Poughkeepsie and Boston Railroad Company, whose property was sold under foreclosure December 14th, 1894. In 1903, this company absorbed the Northampton Railroad Company and, in November, 1904, the Lehigh & Delaware Railroad and the Wind Gap & Delaware Railroad Company. Capital stock $1,000,000. Funded debt $4,180,000.

LUCASTON RAILROAD COMPANY, ... 1.464
Capital $16,000. Gibbsboro to Lucaston. Operated solely in the interest of John Lucas & Company.

MORRISTOWN & ERIE RAILROAD COMPANY.

Main Line, ...	10.618 miles	
Malaparis Branch, ...	2.205 "	
		12.823

Morristown to Essex Fells. Reorganization August, 1903, of the Whippany River Railroad Company. Capital stock $400,000. Funded debt $300,000.

Miles.

MOUNT HOPE MINERAL RAILROAD COMPANY, ... 3.653
Wharton to Mount Hope. Chartered March 16th, 1866. Capital $160,000. Used exclusively for hauling freight by mining interests by which it is controlled. Road extends from Mount Hope to Port Oram, through the townships of Randolph and Rockaway.

NEW JERSEY JUNCTION RAILROAD COMPANY, Main Line, .. 4.438
Harsimus Branch, ... .343
4.781

Weehawken to Jersey City. Incorporated February 27th, 1886. Line starts from West Shore Railroad on the north and runs southerly to the Delaware, Lackawanna & Western Railroad, the Erie Railroad and the Pennsylvania Railroad, under contract. Leased July 1st, 1886, for 100 years, to the New York Central & Hudson River Railroad Company. Authorized capital stock $4,000,000. Issued $100,000. Funded debt $1,700,000. New York Central & Hudson River Railroad owns stock and guarantees bonds.

NEW JERSEY & PENNSYLVANIA RAILROAD COMPANY, ... 24.060
White House to Watnong. Incorporated December 20th, 1904, to consolidate the Rockaway Valley Railroad Company and the Speedwell Lake Railroad Company. Capital $400,000. Funded debt $200,000.

NEW YORK & FORT LEE RAILROAD COMPANY, ... 1.028
Capital stock $1,000,000. Operations included in report of West Shore Railroad Company. Not in Poor's Manual of 1909.

LEGISLATIVE ACTS.

New York and Bulls Ferry Railroad chartered 1861. Name changed to New York & Fort Lee Railroad 1862. Entirely within the taxing district of Weehawken Township.

NORTH JERSEY RAPID TRANSIT COMPANY, ... 8.987
Electric Interurban from Paterson, N. J., to Suffern, N. Y. Chartered in 1908. Capital $2,000,000. Shares $100. Funded debt, $2,500,000; 5 per cent. gold bonds authorized.

Miles.

PEMBERTON & HIGHTSTOWN RAILROAD COMPANY,..... 24.374

Pemberton to Hightstown. Chartered March 24th, 1864. Road opened February 10th, 1868. Controlled by the Pennsylvania Railroad Company. Leased to the Union Transportation Company for 3 years from July 31st, 1896, and from year to year thereafter until terminated by six months written notice from either party. Rental $1,388.79 per annum and cost of maintenance. Capital stock $342,150. Funded debt $160,000.

PHILADELPHIA & BRIGANTINE RAILROAD COMPANY, ... 11.071

Capital stock $300,000. Funded debt $50,000. Road not operated.

POHATCONG RAILROAD COMPANY, ... 1.550

From quarry of Edison Portland Cement Company, near Oxford, to Oxford. Chartered October 21st, 1907. Private road. Operated by the Edison Portland Cement Company. Capital stock authorized $50,000. Paid in $5,000.

RAHWAY VALLEY RAILROAD COMPANY, Main Line,.. 7.000 miles
Lehigh Valley Branch, ... .532 "
Rahway River " ..... 1.042 "
8.574

New Orange to Aldene and Roselle (Junction with Central Railroad of New Jersey and Lehigh Valley Railroad). Incorporated July 18th, 1904, to construct a railroad from New Orange to a connection with the Delaware, Lackawanna & Western Railroad at Summit, about 6 miles. Acquired the line from New Orange to Aldene and Roselle by consolidation with the New Orange Four Junction Railroad Company. Effective March 1st, 1905. No capital stock or bonded debt. Floating debt $350,689. Cost of road $337,689. Rahway Valley Company, Lessee, ... .170

RARITAN RIVER RAILROAD COMPANY, Main Line,... 12.245 miles
Connection with Pennsylvania Railroad, ... .354 "
Sayreville Branch, ... 3.544 "
Serviss " ..... 3.841 "
South River " ..... 1.275 "
21.259

South Amboy to New Brunswick. Incorporated April 20th, 1888. Main line opened July, 1890. Authorized capital stock $1,000,000. Paid in $400,000. Funded debt $400,000.

RARITAN TERMINAL & TRANSPORTATION COMPANY, ... .605

Raritan Copper Works to tracks at Perth Amboy. Incorporated August 4th, 1898. Authorized capital stock, $50,000. Paid in, $40,000.

Miles.

South Easton & Phillipsburg Railroad Company, ... .702
South Easton to Phillipsburg. Organized July 25th, 1889. Road opened January, 1890. Operated by the Lehigh & Hudson River Railway. Capital stock, $150,000. All owned by the Lehigh & Hudson River Railway Company.

Staten Island Rapid Transit Railroad Company, ... .077
South Beach to Arthur Kill, N. Y. Chartered July 31st, 1899, as successor to the Staten Island Rapid Transit Railroad Company, whose property was sold under foreclosure April 20th, 1899. The Baltimore & Ohio Railroad owns 99.64 per cent. ($498,200) of the capital stock, $500,000. Funded debt, $5,000,000.

Trenton, Lawrenceville & Princeton Railroad Company, ... 9.544
Road opened 1901. Owned and operated by the New Jersey & Pennsylvania Traction Company, in whose statement operations are included. Capital stock, $200,000. Funded debt, $100,000.

Trenton, Lawrenceville & Princeton Extension Railroad, .. 1.460
Capital, $50,000. (See Trenton, Lawrenceville & Princeton Railroad Company.)

Trenton Terminal Railroad Company, ... .485
Chartered in perpetuity October 29th, 1903. Road opened 1904. Connects the Trenton & New Brunswick Railroad with the Camden & Trenton Railway and is leased for 99 years to the latter company at an annual rental of $1,000. The lessee pays all charges of maintenance, repairs, etc., excepting interest on bonds and organization expenses. Capital stock, $15,000. Funded debt, $15,000.

Tuckerton Railroad Company, ... 30.797
Whiting's Station to Tuckerton; Tuckerton to Edge Cove (not in operation). Chartered March 26th, 1866. Road opened November 1st, 1871. Reorganized 1880. Authorized common stock, $125,000. Paid in, $106,867.80. Authorized preferred stock, $500,000. Paid in, $445,373.74. Authorized funded debt, $100,000.

Legislative Acts.

Incorporated 1869. Road extends from Whiting's, at the junction of the Philadelphia & Long Branch Railroad with the New Jersey Southern Railway; thence through Manahawkin to Edge Cove, near Tuckerton.

	Miles.
VENICE PARK, ...	.585
Atlantic City & Shore Railroad, Ohio Avenue, Atlantic City, to Venice Park. Capital stock, $10,000; $2,000 outstanding.	
WEST SHORE RAILROAD COMPANY, ...	19.341
Incorporated under the New Jersey laws June 14th, 1881, and under the New York laws December 5th, 1885, as successor to the New York, West Shore & Buffalo Railroad. The Syracuse, Ontario & New York Railway was absorbed June 30th, 1891, and the West Shore & Ontario Terminal Company of New York and New Jersey on June 25th, 1901. The property is leased to the New York Central & Hudson River Railroad Company for 475 years, from January 1st, 1886, at a rental of interest on the bonds. Capital stock, $10,000,000. Funded debt, $57,428,420.	
WHARTON & NORTHERN RAILROAD COMPANY, ...	20.277
Morris County Junction to Green Pond Junction; Wharton to Wharton Junction; Oreland Junction to Oreland. Capital stock, $500,000. Funded debt, $350,000.	
Total miles first track, ...	321.282

SUMMARY OF MILEAGE, FIRST TRACK—REVALUATION SURVEY.
1911.

	Miles.	Miles.
Pennsylvania Railroad System, ...	758.529	
Central Railroad of New Jersey System, ...	443.735	
Philadelphia & Reading Railway System, ...	229.843	
Erie Railroad System ,.....	159.552	
Delaware, Lackawanna & Western R. R. System,	208.071	
New York, Susquehanna & Western R. R. System,	127.028	
Lehigh Valley Railroad System	121.035	
Unclassified railroads, ...	321.282	
Total Miles Railroads, ...		2,369.075

CANALS.

DELAWARE & RARITAN CANAL,			
Waterways, ...	43.457		
Canal Feeder, ...	22.727		
		66.184	
MORRIS CANAL & BANKING COMPANY.			
Chartered 1824.			
Waterways, ...	102.648		
Lake Hopatcong Feeder, ...	.695		
Pompton Feeder, ...	5.417		
		108.760	
Total Miles Canals, ...			174.944
Total Miles Railroads and Canals, ...			2,544.019

Recapitulation of Track Mileage, New Jersey.
1911.

Miles of route,	2,369.075	
" " second track,	897.179	
" " third track,	156.915	
" " fourth track,	140.278	
" " running track,	———	3,563.447
" " sidings,		1,885.837
Total Miles of All Tracks,		5,449.284

Percentage of Miles of Route to Total Miles of all Tracks,	43.47
Percentage of Miles of Sidings to Total Miles of all Tracks,	34.60
Percentage of Miles of Second Track to Miles of all Route,	37.87
Percentage of Miles of Third Track to Miles of all Route,	6.62
Percentage of Miles of Fourth Track to Miles of all Route,	5.92

Note.—Length of main stem and length of track do not agree in some cases, for the reason that track does not extend the full length of main stem in all cases and, on branch lines, the main stem is measured from right-of-way line of main track.

The foregoing statement is of miles of rail only and does not include main stem upon which no rails are laid. The length of main stem will exceed the miles of track-route. The most notable example being the mileage of main stem of Lackawanna Railroad of New Jersey which is 27.38 miles in length

VALUATION OF

Railroads and Canals of New Jersey

1911

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RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— PENNSYLVANIA SYSTEM. **Name of Railroad System— PENNSYLVANIA RAILROAD.**

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$7,097,140	$7,097,140	$14,091,060	$14,091,060	$21,188,200	$21,188,200
2. Clearing and grubbing,	118,773	118,773	.....	.....	118,773	118,773
3. Graduation,	7,837,106	7,837,106	1,239,871	1,239,871	9,076,977	9,076,977
4. Tunnels,	5,302,096	5,037,000	.....	.....	5,302,096	5,037,000
5. Bridges, retaining walls and culverts,	15,219,544	12,757,952	405,043	321,175	15,624,587	13,079,127
6. Track and its appurtenances,	13,822,438	9,826,415	2,453,140	1,677,312	16,275,578	11,503,727
7. Fencing,	149,260	119,191	19,425	14,968	168,685	134,159
8. Crossings, cattle guards, gates and signs,	146,127	104,612	4,218	2,817	150,345	107,429
9. Block signaling,	619,806	419,719	.....	.....	619,806	419,179
10. Interlocking,	1,100,961	983,523	16,772	10,410	1,117,733	993,933
11. Miscellaneous signals,	130,600	81,610	.....	.....	130,600	81,610
12. Passenger and freight stations,	.....	.....	3,223,202	2,253,741	3,223,202	2,253,741
13. Shop buildings and engine houses,	5,710	3,275	2,224,260	1,688,476	2,229,970	1,691,751
14. Docks and piers,	.....	.....	3,519,267	2,386,931	3,519,267	2,386,931
15. Telegraph and telephone lines,	602,591	451,334	.....	.....	602,591	451,334
16. Turn-tables, transfer tables, track scales and track cranes,	29,592	21,670	477,963	319,238	507,555	340,908
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	1,900,989	1,532,785	1,900,989	1,532,785
19. Grain elevators,	.....	.....	588,986	392,400	588,986	392,400
20. Miscellaneous structures,	2,165,644	1,784,016	1,630,553	1,126,377	3,796,197	2,910,393
21. Shop machinery, tools and appurtenances,	1,937,321	1,630,441	.....	.....	1,937,321	1,630,441
22. Locomotives,	7,753,387	4,980,651	.....	.....	7,753,387	4,980,651
23. Passenger train equipment,	8,275,105	6,663,159	.....	.....	8,275,105	6,663,159
24. Freight train equipment,	14,562,411	9,828,318	.....	.....	14,562,411	9,828,318
25. Miscellaneous road equipment,	156,278	101,637	.....	.....	156,278	101,637
26. Floating or marine equipment,	7,142,950	4,232,861	.....	.....	7,142,950	4,232,861
27. Total value of tangible property,	$94,174,840	$74,080,403	$31,794,749	$27,057,561	$125,969,589	$101,137,964
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						20,899,800
29. Total value of all items as above,						122,037,764
Deduction, B. R. R., P. T. & T. Co., P. & B. H. R. R., Total,						2,254,552
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property		$327,000				$119,783,212

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— PENNSYLVANIA RAILROAD, LESSEE.

Name of Railroad System— PENNSYLVANIA RAILROAD, LESSEE.

Description.	Main Stem		Second Class		5.	6.
	1. *Value New.*	2. *Present Value.*	3. *Value New.*	4. *Present Value.*	Value New Total.	Present Value Total.
1. Land,	.....	.....	.....	.....	.....	.....
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	.....	.....	.....	.....	.....	.....
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	$6,747,837	$4,350,158	.....	.....	$6,747,837	$4,350,158
23. Passenger train equipment,	6,549,305	5,727,974	.....	.....	6,549,305	3,727,974
24. Freight train equipment,	14,107,086	9,592,818	.....	.....	14,107,086	9,592,818
25. Miscellaneous road equipment,	88,936	60,477	.....	.....	88,936	60,477
26. Floating or marine equipment,	6,849,950	4,133,513	.....	.....	6,849,950	4,133,513
27. Total value of tangible property,	$34,343,114	$23,864,940	.....	.....	$34,343,114	$23,864,940

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— BARNEGAT.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$21,144	$21,144	$7,473	$7,473	$28,617	$28,617
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	8,240	8,240	.....	.....	8,240	8,240
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	7,389	5,527	.....	.....	7,389	5,527
6. Track and its appurtenances,	53,559	38,035	133	91	53,692	38,126
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	85	48	.....	.....	85	48
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	3,638	2,280	3,638	2,280
13. Shop buildings and engine houses,	1,095	603	1,064	150	2,159	753
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	1,171	878	.....	.....	1,171	878
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,519	828	411	200	1,930	1,028
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$94,202	$75,303	$12,719	$10,194	$106,921	$85,497
Amount recommend by Charles Hansel for assessment,						31,689
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$32,689

SUMMARY SHEET.

Name of Railroad— BELVIDERE AND DELAWARE.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	—Main Stem— 1. Value New.	2. Present Value.	—Second Class— 3. Value New.	4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$364,085	$364,085	$136,049	$136,049	$500,134	$500,134
2. Clearing and grubbing,	17,035	17,035	.....	.....	17,035	17,035
3. Graduation,	964,404	964,404	55,053	55,053	1,019,457	1,019,457
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,198,848	875,007	31,226	24,344	1,230,074	899,351
6. Track and its appurtenances,	853,584	595,978	61,582	41,095	915,166	637,073
7. Fencing,	6,781	3,495	96	87	6,877	3,582
8. Crossings, cattle guards, gates and signs,	8,126	'5,903	16	12	8,142	5,915
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	21,498	15,590	.....	.....	21,498	15,590
11. Miscellaneous signals,	7,396	4,807	.....	.....	7,396	4,807
12. Passenger and freight stations,	.....	.....	133,249	83,648	133,249	83,648
13. Shop buildings and engine houses,	.....	.....	68,081	39,347	68,081	39,347
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	48,775	36,581	.....	.....	48,775	36,581
16. Turn-tables, transfer tables, track scales and track cranes,	7,738	5,567	34,390	20,519	42,128	26,086
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	32,415	22,805	44,052	29,971	76,467	52,776
21. Shop machinery, tools and appurtenances,	13,991	7,914	.....	.....	13,991	7,914
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$3,544,676	$2,919,171	$563,794	$430,125	$4,108,470	$3,349,296
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$3,350,296

SUMMARY SHEET.

Name of Railroad— CAMDEN AND BURLINGTON COUNTY.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$84,437	$84,437	$16,953	$16,953	$101,390	$101,390
2. Clearing and grubbing,	1,209	1,209	.....	.....	1,209	1,209
3. Graduation,	81,160	81,160	289	289	81,449	81,449
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	83,849	64,940	.....	.....	83,849	64,940
6. Track and its appurtenances,	302,780	214,092	9,631	6,558	312,411	220,650
7. Fencing,	.....	.....	418	278	418	278
8. Crossings, cattle guards, gates and signs,	6,920	4,818	.....	.....	6,920	4,818
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	4,619	3,564	.....	.....	4,619	3,564
11. Miscellaneous signals,	3,232	2,152	.....	.....	3,232	2,152
12. Passenger and freight stations,	.....	.....	60,991	43,985	60,991	43,985
13. Shop buildings and engine houses,	.....	.....	11,778	8,000	11,778	8,000
14. Docks and piers,	.....	.....	2,996	1,000	2,996	1,000
15. Telegraph and telephone lines,						
16. Turn-tables, transfer tables, track scales and track cranes,	9,930	7,447	.....	.....	9,930	7,447
	.....	.....	12,413	7,450	12,413	7,450
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	12,152	8,641	15,963	10,110	28,115	18,751
21. Shop machinery, tools and appurtenances,	1,125	1,125	.....	.....	1,125	1,125
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$591,413	$473,585	$131,432	$94,623	$722,845	$568,208
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$569,208

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—
DELAWARE RIVER R. R. AND BRIDGE COMPANY.

Name of Railroad System—
PENNSYLVANIA RAILROAD.

Description.	Main Stem		Second Class		5. Value New Total.	6. Present Value Total.
	1. *Value New.*	2. *Present Value.*	3. *Value New.*	4. *Present Value.*		
1. Land,	$30,637	$30,637	$6,642	$6,642	$37,279	$37,279
2. Clearing and grubbing,	296	296	.....	.....	296	296
3. Graduation,	154,070	154,070	.....	.....	154,070	154,070
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	962,517	688,617	.....	.....	962,517	688,617
6. Track and its appurtenances,	172,265	123,529	.....	.....	172,265	123,529
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	915	634	.....	.....	915	634
9. Block signaling,	12,400	8,060	.....	.....	12,400	8,060
10. Interlocking,	15,885	12,933	.....	.....	15,885	12,933
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	2,222	1,667	.....	.....	2,222	1,667
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,553	1,142	.....	.....	1,553	1,142
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$1,352,760	$1,021,585	$6,642	$6,642	$1,359,402	$1,028,227
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,620,300
29. Total value of all items as above,						$2,648,527

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— FREEHOLD AND JAMESBURG AGRICULTURAL.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$63,200	$63,200	$15,774	$15,774	$78,974	$78,974
2. Clearing and grubbing,	2,839	2,839	.....	.....	2,839	2,839
3. Graduation,	83,570	83,570	801	801	84,371	84,371
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	74,774	58,325	.....	.....	74,774	58,325
6. Track and its appurtenances,	329,981	239,750	5,484	3,762	335,465	243,512
7. Fencing,	2,974	1,992	.....	.....	2,974	1,992
8. Crossings, cattle guards, gates and signs,	3,893	2,674	.....	.....	3,893	2,674
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	5,742	5,512	.....	.....	5,742	5,512
11. Miscellaneous signals,	2,671	1,737	.....	.....	2,671	1,737
12. Passenger and freight stations,	.....	.....	28,281	20,119	28,281	20,119
13. Shop buildings and engine houses,	.....	.....	3,992	2,180	3,992	2,180
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	12,840	9,630	.....	.....	12,840	9,630
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	4,494	2,250	4,494	2,250
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	15,532	11,751	5,522	3,135	21,054	14,886
21. Shop machinery, tools and appurtenances,	1,017	1,017	.....	.....	1,017	1,017
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$599,033	$481,997	$64,348	$48,021	$663,381	$530,018
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						152,300
29. Total value of all items as above,						$682,318

SUMMARY SHEET.

Name of Railroad—
HARRISON AND EAST NEWARK CONN. R. R. COMPANY.

Name of Railroad System—
PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$4,543	$4,543	.....	.....	$4,543	$4,543
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	130	130	.....	.....	130	130
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	1,923	1,328	.....	.....	1,923	1,328
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$6,596	$6,001	.....	.....	$6,596	$6,001
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$7,001

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— KINKORA AND NEW LISBON.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$5,483	$5,483	$142	$142	$5,625	$5,625
2. Clearing and grubbing,	111	111	.....	.....	111	111
3. Graduation,	16,820	16,820	.....	.....	16,820	16,820
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	27,677	21,243	.....	.....	27,677	21,243
6. Track and its appurtenances,	73,120	52,171	174	120	73,294	52,291
7. Fencing,	2,400	1,546	.....	.....	2,400	1,546
8. Crossings, cattle guards, gates and signs,	995	602	.....	.....	995	602
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	373	187	.....	.....	373	187
12. Passenger and freight stations,	.....	.....	7,555	3,975	7,555	3,975
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	2,777	2,083	.....	.....	2,777	2,083
16 Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	474	346	.....	.....	474	346
21. Shop machinery, tools and appurtenances,	185	185	.....	.....	185	185
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$130,415	$100,777	$7,871	$4,237	$138,286	$105,014
28. Value of sub-division IV. "The value of remaining property, including the franchise."						1,000
29. Total value of all items as above,						$106,014

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.
SUMMARY SHEET.

Name of Railroad— MILLSTONE AND NEW BRUNSWICK.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$7,337	$7,337	$1,293	$1,293	$8,630	$8,630
2. Clearing and grubbing,	422	422	.....	.....	422	422
3. Graduation,	35,670	35,670	733	733	36,403	36,403
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	6,694	5,524	.....	.....	6,694	5,524
6. Track and its appurtenances,	56,726	40,305	1,660	1,130	58,386	41,435
7. Fencing,	1,575	788	41	32	1,616	820
8. Crossings, cattle guards, gates and signs,	471	300	.....	.....	471	300
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	6,716	3,791	6,716	3,791
13. Shop buildings and engine houses,	.....	.....	3,515	1,412	3,515	1,412
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	2,199	1,649	.....	.....	2,199	1,649
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	742	370	63	47	805	417
20. Miscellaneous structures,	50	50	.....	.....	50	50
21. Shop machinery, tools and appurtenances,						
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$111,886	$92,415	$14,021	$8,438	$125,907	$100,853
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$101,853

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.
SUMMARY SHEET.

Name of Railroad—
MOUNT HOLLY, LUMBERTON AND MEDFORD.

Name of Railroad System—
PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$6,488	$6,488	$1,591	$1,591	$8,079	$8,079
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	16,920	16,920	.....	.....	16,920	16,920
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	5,317	4,310	.....	.....	5,317	4,310
6. Track and its appurtenances,	47,525	33,766	2,060	1,408	49,585	35,174
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	272	163	.....	.....	272	163
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	4,882	3,005	4,882	3,005
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	1,050	788	.....	.....	1,050	788
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	479	359	1,525	1,100	2,004	1,459
21. Shop machinery, tools and appurtenances,	15	15	.....	.....	15	15
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$78,066	$62,809	$10,058	$7,104	$88,124	$69,913
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$70,913

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— NEW YORK BAY.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$464,969	$464,969	$2,673,831	$2,673,831	$3,138,800	$3,138,800
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	260,060	260,060	.....	.....	260,060	260,060
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	998,558	807,120	73,371	48,531	1,071,929	855,651
6. Track and its appurtenances,	319,839	222,283	376,443	257,381	696,282	479,664
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	2,827	1,928	94	65	2,921	1,993
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	21,891	17,198	.....	.....	21,891	17,198
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	4,640	2,816	4,640	2,816
13. Shop buildings and engine houses,	.....	.....	141,198	115,080	141,198	115,080
14. Docks and piers,	.....	.....	765,915	589,075	765,915	589,075
15. Telegraph and telephone lines,	13,557	10,168	.....	.....	13,557	10,168
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	159,624	105,243	159,624	105,243
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	5,035	3,698	74,735	56,951	79,770	60,649
21. Shop machinery, tools and appurtenances,	26,167	19,082	.....	.....	26,167	19,082
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$2,112,903	$1,806,506	$4,269,851	$3,848,973	$6,382,754	$5,655,479
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						4,615,400
29. Total value of all items as above,						$10,270,879

SUMMARY SHEET.

Name of Railroad— PENNSYLVANIA TUNNEL AND TERMINAL COMPANY.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$207,245	$207,245	$52,699	$52,699	$259,944	$259,944
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	648,210	648,210	.....	.....	648,210	648,210
4. Tunnels,	5,302,096	5,037,000	.....	.....	5,302,096	5,037,000
5. Bridges, retaining walls and culverts,	1,369,845	1,342,448	.....	.....	1,369,845	1,342,448
6. Track and its appurtenances,	227,507	165,191	429	309	227,936	165,500
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	106,410	106,410	.....	.....	106,410	106,410
10. Interlocking,	322,210	322,210	.....	.....	322,210	322,210
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	41,171	30,270	.....	.....	41,171	30,270
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	317,790	285,500	317,790	285,500
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	384,815	372,301	.....	.....	384,815	372,301
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$8,609,509	$8,231,285	$370,918	$338,508	$8,980,427	$8,569,793
Reduction on account of obsolescence,						$6,427,345
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$6,428,345

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— PERTH AMBOY AND WOODBRIDGE.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$99,684	$99,684	$27,735	$27,735	$127,419	$127,419
2. Clearing and grubbing,	353	353	.....	.....	353	353
3. Graduation,	46,454	46,454	.....	.....	46,454	46,454
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	62,988	53,340	.....	.....	62,988	53,340
6. Track and its appurtenances,	143,199	102,078	10,202	7,047	153,401	109,125
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	3,468	2,438	.....	.....	3,468	2,438
9. Block signaling,	3,780	2,457	.....	.....	3,780	2,457
10. Interlocking,	5,793	4,215	.....	.....	5,793	4,215
11. Miscellaneous signals,	562	365	.....	.....	562	365
12. Passenger and freight stations,	.....	.....	23,512	16,539	23,512	16,539
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	3,743	2,808	.....	.....	3,743	2,808
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	15,817	13,550	15,817	13,550
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	4,149	3,091	773	504	4,922	3,595
21. Shop machinery, tools and appurtenances,	305	305	.....	.....	305	305
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$374,478	$317,588	$78,039	$65,375	$452,517	$382,963
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,340,400
29. Total value of all items as above,						$1,723,363

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— PHILADELPHIA AND BEACH HAVEN.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$16,768	$16,768	$4,643	$4,643	$21,411	$21,411
2. Clearing and grubbing,	681	681	.....	.....	681	681
3. Graduation,	11,260	11,260	.....	.....	11,260	11,260
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	82,725	58,514	.....	.....	82,725	58,514
6. Track and its appurtenances,	82,900	59,181	3,115	2,168	86,015	61,349
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	115	79	.....	.....	115	79
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	6,773	5,065	6,773	5,065
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	2,092	1,569	.....	.....	2,092	1,569
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	3,187	2,019	1,650	1,035	4,837	3,054
21. Shop machinery, tools and appurtenances,	40	40	.....	.....	40	40
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$199,768	$150,111	$16,181	$12,911	$215,949	$163,022
Amount recommended by Charles Hansel for assessment,						$104,726
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$105,726

SUMMARY SHEET.

Name of Railroad— PHILADELPHIA AND LONG BRANCH.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$36,673	$36,673	$11,957	$11,957	$48,630	$48,630
2. Clearing and grubbing,	17,391	17,391	.....	.....	17,391	17,391
3. Graduation,	63,710	63,710	193	193	63,903	63,903
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	199,767	148,315	.....	.....	199,767	148,315
6. Track and its appurtenances,	429,086	308,012	8,879	6,087	437,965	314,099
7. Fencing,	.....	.....	400	300	400	300
8. Crossings, cattle guards, gates and signs,	1,625	1,063	.....	.....	1,625	1,063
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	7,198	6,603	.....	.....	7,198	6,603
11. Miscellaneous signals,	3,350	2,207	.....	.....	3,350	2,207
12. Passenger and freight stations,	.....	.....	36,417	26,325	36,417	26,325
13. Shop buildings and engine houses,	1,940	1,067	.....	.....	1,940	1,067
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	18,290	13,715	.....	.....	18,290	13,715
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	16,014	12,012	3,317	1,870	19,331	13,882
21. Shop machinery, tools and appurtenances,	485	485	.....	.....	485	485
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$795,529	$611,253	$61,163	$46,732	$856,692	$657,985
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$658,985

SUMMARY SHEET.

Name of Railroad—
ROCKY HILL RAILROAD AND TRANSPORTATION COMPANY.

Name of Railroad System—
PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,055	$1,055	$750	$750	$1,805	$1,805
2. Clearing and grubbing,	346	346	.....	.....	346	346
3. Graduation,	5,410	5,410	.....	.....	5,410	5,410
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,932	1,648	.....	.....	1,932	1,648
6. Track and its appurtenances,	24,753	17,612	336	230	25,089	17,842
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	65	37	.....	.....	65	37
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	44	33	.....	.....	44	33
12. Passenger and freight stations,	.....	.....	3,657	2,210	3,657	2,210
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	499	374	.....	.....	499	374
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	564	264	.....	.....	564	264
21. Shop machinery, tools and appurtenances,	90	90	.....	.....	90	90
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$34,758	$26,869	$4,743	$3,190	$39,501	$30,059
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$31,059

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— UNITED NEW JERSEY RAILROAD AND CANAL CO.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$3,847,291	$3,847,291	$10,165,309	$10,165,309	$14,012,600	$14,012,600
2. Clearing and grubbing,	14,282	14,282	.....	.....	14,282	14,282
3. Graduation,	4,326,253	4,326,253	1,123,609	1,123,609	5,449,862	5,449,862
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	8,877,454	7,583,751	298,310	246,794	9,175,764	7,830,545
6. Track and its appurtenances,	5,088,101	3,557,263	1,725,323	1,179,080	6,813,424	4,736,343
7. Fencing,	45,094	32,511	11,623	8,432	56,717	40,943
8. Crossings, cattle guards, gates and signs,	28,382	19,941	1,149	890	29,531	20,831
9. Block signaling,	209,417	109,413	.....	.....	209,417	109,413
10. Interlocking,	445,920	379,364	16,772	10,410	462,692	389,774
11. Miscellaneous signals,	90,157	54,064	.....	.....	90,157	54,064
12. Passenger and freight stations,	.....	.....	2,304,713	1,600,217	2,304,713	1,600,217
13. Shop buildings and engine houses,	.....	.....	1,881,679	1,443,462	1,881,679	1,443,462
14. Docks and piers,	.....	.....	2,680,962	1,753,976	2,680,962	1,753,976
15. Telegraph and telephone lines,	240,597	180,449	.....	.....	240,597	180,449
16. Turn-tables, transfer tables, track scales and track cranes,	13,975	10,852	234,167	157,996	248,142	168,848
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	385,684	265,910	385,684	265,910
19. Grain elevators,	.....	.....	588,986	392,400	588,986	392,400
20. Miscellaneous structures,	721,762	517,915	1,361,404	945,689	2,083,166	1,463,604
21. Shop machinery, tools and appurtenances,	1,862,848	1,576,956	.....	.....	1,862,848	1,576,956
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$25,811,533	$22,210,305	$22,779,690	$19,294,174	$48,591,223	$41,504,479
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						11,849,600
29. Total value of all items as above,						$53,354,079
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$377,000				

SUMMARY SHEET.

Name of Railroad— VINCENTOWN BRANCH.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,545	$1,545	$675	$675	$2,220	$2,220
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	6,120	6,120	.....	.....	6,120	6,120
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	901	676	.....	.....	901	676
6. Track and its appurtenances,	20,737	14,764	1,177	809	21,914	15,573
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	111	67	.....	.....	111	67
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	3,168	2,110	3,168	2,110
13. Shop buildings and engine houses,	.....	.....	2,461	600	2,461	600
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	510	383	.....	.....	510	383
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	706	310	706	310
21. Shop machinery, tools and appurtenances,	40	40	.....	.....	40	40
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$29,964	$23,595	$8,187	$4,504	$38,151	$28,099
Amount recommended for assessment by Charles Hansel,						$22,679
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$23,679

SUMMARY SHEET.

Name of Railroad— WEST JERSEY AND SEA SHORE.

Name of Railroad System— PENNSYLVANIA RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,834,556	$1,834,556	$967,544	$967,544	$2,802,100	$2,802,100
2. Clearing and grubbing,	63,808	63,808	.....	.....	63,808	63,808
3. Graduation,	1,108,645	1,108,645	59,193	59,193	1,167,838	1,167,838
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,258,309	1,037,319	2,136	1,506	1,260,445	1,038,825
6. Track and its appurtenances,	5,594,853	4,042,405	246,512	170,037	5,841,365	4,212,442
7. Fencing,	90,436	78,859	6,847	5,839	97,283	84,698
8. Crossings, cattle guards, gates and signs,	87,857	63,917	2,959	1,850	90,816	65,767
9. Block signaling,	287,799	193,379	.....	.....	287,799	193,379
10. Interlocking,	250,205	216,334	.....	.....	250,205	216,334
11. Miscellaneous signals,	22,815	16,058	.....	.....	22,815	16,058
12. Passenger and freight stations,	.....	.....	595,010	437,656	595,010	437,656
13. Shop buildings and engine houses,	2,675	1,605	110,492	78,245	113,167	79,850
14. Docks and piers,	.....	.....	69,394	42,880	69,394	42,880
15. Telegraph and telephone lines,	201,168	150,875	.....	.....	201,168	150,875
16. Turn-tables, transfer tables, track scales and track cranes,	7,879	5,251	17,058	12,230	24,937	17,481
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	1,197,515	981,375	1,197,515	981,375
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	965,252	826,474	120,432	75,455	1,085,684	901,929
21. Shop machinery, tools and appurtenances,	30,963	23,137	.....	.....	30,963	23,137
22. Locomotives,	1,005,550	630,493	.....	.....	1,005,550	630,493
23. Passenger train equipment,	1,725,800	935,185	.....	.....	1,725,800	935,185
24. Freight train equipment,	455,325	235,500	.....	.....	455,325	235,500
25. Miscellaneous road equipment,	67,342	41,160	.....	.....	67,342	41,160
26. Floating or marine equipment,	293,000	99,348	.....	.....	293,000	99,348
27. Total value of tangible property,	$15,354,237	$11,604,308	$3,395,092	$2,833,810	$18,749,329	$14,438,118
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,309,800
29. Total value of all items as above,						$15,747,918

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— CENTRAL RAILROAD OF NEW JERSEY SYSTEM.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$4,933,860	$4,933,860	$8,206,452	$8,206,452	$13,140,312	$13,140,312
2. Clearing and grubbing,	62,403	62,403	.....	.....	62,403	62,403
3. Graduation,	3,801,117	3,801,117	233,571	233,571	4,034,688	4,034,688
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	6,155,473	4,848,868	80,238	65,626	6,235,711	4,914,494
6. Track and its appurtenances,	7,330,121	5,141,920	1,334,704	914,118	8,664,825	6,056,038
7. Fencing,	49,150	36,445	9,644	7,246	58,794	43,691
8. Crossings, cattle guards, gates and signs,	121,650	85,736	1,381	1,074	123,031	86,810
9. Block signaling,	299,358	199,957	.....	.....	299,358	199,957
10. Interlocking,	375,915	263,638	.....	.....	375,915	263,638
11. Miscellaneous signals,	12,621	6,395	.....	.....	12,621	6,395
12. Passenger and freight stations,	.....	.....	1,799,955	1,185,805	1,799,955	1,185,805
13. Shop buildings and engine houses,	7,151	3,587	1,231,663	956,720	1,238,814	960,307
14. Docks and piers,	.....	.....	1,656,994	1,191,366	1,656,994	1,191,366
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	19,888	15,220	189,959	141,759	209,847	156,979
17. Pintsch gas plants,	.....	.....	44,940	38,000	44,940	38,000
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures.	297,355	217,613	688,992	467,377	986,347	684,990
21. Shop machinery, tools and appurtenances,	526,885	343,162	.....	.....	526,885	343,162
22. Locomotives,	4,232,663	2,306,238	.....	.....	4,232,663	2,306,238
23. Passenger train equipment,	2,655,213	1,488,821	.....	.....	2,655,213	1,488,821
24. Freight train equipment,	13,996,612	9,494,016	.....	.....	13,996,612	9,494,016
25. Miscellaneous road equipment,	200,242	100,778	.....	.....	200,242	100,778
26. Floating or marine equipment,	4,543,000	3,144,370	.....	.....	4,543,000	3,144,370
27. Total value of tangible property,	$49,620,677	$36,494,144	$15,478,493	$13,409,114	$65,099,170	$49,903,258
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						22,278,200
29. Total value of all items as above,						$72,181,458
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,			$536,242			

SUMMARY SHEET.

Name of Railroad— BUENA VISTA.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

DESCRIPTION.	MAIN STEM 1. Value New.	MAIN STEM 2. Present Value.	SECOND CLASS 3. Value New.	SECOND CLASS 4. Present Value.	5. VALUE NEW TOTAL.	6. PRESENT VALUE TOTAL.
1. Land,	$393	$393	$32	$32	$425	$425
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	2,050	2,050	.....	.....	2,050	2,050
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	66	50	.....	.....	66	50
6. Track and its appurtenances,	9,511	6,423	.....	.....	9,511	6,423
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	62	42	.....	.....	62	42
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	54	10	54	10
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	12,546	8,100	12,546	8,100
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	393	155	.....	.....	393	155
21. Shop machinery, tools and appurtenances,	35	35	.....	.....	35	35
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$12,510	$9,148	$12,632	$8,142	$25,142	$17,290
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$18,290

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.
SUMMARY SHEET.

Name of Railroad— CARTERET EXTENSION.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$22,714	$22,714	$1,470	$1,470	$24,184	$24,184
2. Clearing and grubbing,	41	41	.....	.....	41	41
3. Graduation,	8,740	8,740	.....	.....	8,740	8,740
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,159	869	.....	.....	1,159	869
6. Track and its appurtenances,	17,297	12,188	4,307	2,703	21,604	14,891
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	369	289	.....	.....	369	289
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	59	30	.....	.....	59	30
12. Passenger and freight stations,	.....	.....	2,953	2,050	2,953	2,050
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	110	110	.....	.....	110	110
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$50,489	$44,981	$8,730	$6,223	$59,219	$51,204
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$52,204

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.
SUMMARY SHEET.

Name of Railroad— CARTERET AND SEWAREN.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem— 1. Value New.	Main Stem— 2. Present Value.	Second Class— 3. Value New.	Second Class— 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$19,079	$19,079	.....	.....	$19,079	$19,079
2. Clearing and grubbing,	34	34	.....	.....	34	34
3. Graduation,	1,250	1,250	.....	.....	1,250	1,250
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	10,549	7,215	$831	$474	11,380	7,689
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	32	22	.....	.....	32	22
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	373	190	373	190
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$30,944	$27,600	$1,204	$664	$32,148	$28,264
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$29,264

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— CENTRAL RAILROAD OF NEW JERSEY.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$3,509,890	$3,509,890	$7,806,281	$7,806,281	$11,316,171	$11,316,171
2. Clearing and grubbing,	15,109	15,109	.....	.....	15,109	15,109
3. Graduation,	2,671,508	2,671,508	217,133	217,133	2,888,641	2,888,641
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	4,373,963	3,355,306	72,667	62,096	4,446,630	3,417,402
6. Track and its appurtenances,	4,433,488	3,132,439	1,187,337	813,972	5,620,825	3,946,411
7. Fencing,	43,164	32,047	8,224	6,224	51,388	38,271
8. Crossings, cattle guards, gates and signs,	50,892	36,741	1,123	879	52,015	37,620
9. Block signaling,	219,330	147,939	.....	.....	219,330	147,939
10. Interlocking,	273,291	192,871	.....	.....	273,291	192,871
11. Miscellaneous signals,	10,757	5,445	.....	.....	10,757	5,445
12. Passenger and freight stations,	.....	.....	1,321,406	827,687	1,321,406	827,687
13. Shop buildings and engine houses,	1,840	787	1,180,741	923,920	1,182,581	924,707
14. Docks and piers,	.....	.....	1,463,791	1,063,550	1,463,791	1,063,550
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	11,523	9,480	116,610	88,336	128,133	97,816
17. Pintsch gas plants,	.....	.....	44,940	38,000	44,940	38,000
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	67,379	46,577	595,038	395,544	662,417	442,121
21. Shop machinery, tools and appurtenances,	489,547	320,621	.....	.....	489,547	320,621
22. Locomotives,	4,232,663	2,306,238	.....	.....	4,232,663	2,306,238
23. Passenger train equipment,	2,655,213	1,488,821	.....	.....	2,655,213	1,488,821
24. Freight train equipment,	13,996,612	9,494,016	.....	.....	13,996,612	9,494,016
25. Miscellaneous road equipment,	200,242	100,778	.....	.....	200,242	100,778
26. Floating or marine equipment,	4,543,000	3,144,370	.....	.....	4,543,000	3,144,370
27. Total value of tangible property,	$41,799,411	$30,010,983	$14,015,291	$12,243,622	$55,814,702	$42,254,695
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						22,252,200
29. Total value of all items as above,						$64,506,805
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$437,437				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— CUMBERLAND AND MAURICE RIVER.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$14,512	$14,512	$4,599	$4,599	$19,111	$19,111
2. Clearing and grubbing,	4,034	4,034	.....	.....	4,034	4,034
3. Graduation,	69,050	69,050	190	190	69,240	69,240
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	5,879	4,257	.....	.....	5,879	4,257
6. Track and its appurtenances,	135,362	92,325	4,250	2,910	139,612	95,235
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	1,719	1,094	.....	.....	1,719	1,094
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	43,182	30,067	43,182	30,067
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	21,201	9,436	21,201	9,436
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	4,173	1,043	4,173	1,043
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,861	1,127	2,232	1,333	5,093	2,460
21. Shop machinery, tools and appurtenances,	372	372	.....	.....	372	372
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$233,789	$186,771	$79,827	$49,578	$313,616	$236,349
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$237,349
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$1,950				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—
CUMBERLAND AND MAURICE RIVER EXTENSION.

Name of Railroad System—
CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,909	$1,909	$33	$33	$1,942	$1,942
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	5,120	5,120	.....	.....	5,120	5,120
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	8,411	5,659	.....	.....	8,411	5,659
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	31	21	.....	.....	31	21
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	6,420	5,130	6,420	5,130
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	46	23	.....	.....	46	23
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$15,517	$12,732	$6,453	$5,163	$21,970	$17,895
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$18,895

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— DOVER AND ROCKAWAY.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$58,358	$58,358	$2,242	$2,242	$60,600	$60,600
2. Clearing and grubbing,	314	314	.....	.....	314	314
3. Graduation,	41,490	41,490	1,037	1,037	42,527	42,527
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	21,919	14,939	2,636	1,715	24,555	16,654
6. Track and its appurtenances,	48,483	32,774	8,925	6,155	57,408	38,929
7. Fencing,	167	125	.....	.....	167	125
8. Crossings, cattle guards, gates and signs,	1,489	1,056	.....	.....	1,489	1,056
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	1,102	850	.....	.....	1,102	850
11. Miscellaneous signals,	110	56	.....	.....	110	56
12. Passenger and freight stations,	.....	.....	7,558	5,290	7,558	5,290
13. Shop buildings and engine houses,	.....	.....	5,054	3,535	5,054	3,535
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	8,560	6,685	8,560	6,685
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,089	768	1,819	1,455	2,908	2,223
21. Shop machinery, tools and appurtenances,	155	155	.....	.....	155	155
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$174,676	$150,885	$37,831	$28,114	$212,507	$178,999
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$179,999

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— ELIZABETH EXTENSION.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,851	$1,851	$150	$150	$2,001	$2,001
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	3,960	3,960	.....	.....	3,960	3,960
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	305	183	.....	.....	305	183
6. Track and its appurtenances,	15,603	10,601	196	134	15,799	10,735
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	7	4	.....	.....	7	4
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$21,726	$16,599	$346	$284	$22,072	$16,883
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$17,883

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— FREEHOLD AND ATLANTIC HIGHLANDS.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$54,964	$54,964	$17,427	$17,427	$72,391	$72,391
2. Clearing and grubbing,	430	430	.....	.....	430	430
3. Graduation,	150,730	150,730	930	930	151,660	151,660
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	50,658	36,711	.....	.....	50,658	36,711
6. Track and its appurtenances,	216,424	149,315	9,389	6,383	225,813	155,698
7. Fencing,	122	88	154	110	276	198
8. Crossings, cattle guards, gates and signs,	7,700	5,390	.....	.....	7,700	5,390
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	4,505	2,298	.....	.....	4,505	2,298
11. Miscellaneous signals,	550	280	.....	.....	550	280
12. Passenger and freight stations,	.....	.....	35,163	26,541	35,163	26,541
13. Shop buildings and engine houses,	.....	.....	6,111	3,805	6,111	3,805
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15 Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	4,081	2,774	4,497	3,105	8,578	5,879
21 Shop machinery, tools and appurtenances,	665	665	.....	.....	665	665
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property.	$490,829	$403,645	$73,671	$58,301	$564,500	$461,946
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$462,946
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$3,100				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— HIBERNIA MINE.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$7,283	$7,283	$964	$964	$8,247	$8,247
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	20,670	20,670	2,558	2,558	23,228	23,228
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	15,847	10,013	4,272	1,282	20,119	11,295
6. Track and its appurtenances,	39,556	26,615	14,288	9,708	53,844	36,323
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	750	530	.....	.....	750	530
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	2,161	1,610	2,161	1,610
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	1,761	1,321	1,605	1,125	3,366	2,446
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	382	288	497	300	879	588
21. Shop machinery, tools and appurtenances,	110	110	.....	.....	110	110
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$86,359	$66,830	$26,345	$17,547	$112,704	$84,377
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$85,377

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— LAFAYETTE.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$19,996	$19,996	.....	.....	$19,996	$19,996
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	580	580	.....	.....	580	580
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	13,201	9,939	.....	.....	13,201	9,939
6. Track and its appurtenances,	9,108	6,120	$3,385	$2,291	12,493	8,411
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	231	160	231	160
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	2,523	1,975	2,523	1,975
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$42,885	$36,635	$6,139	$4,426	$49,024	$41,061
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$42,061

SUMMARY SHEET.

Name of Railroad— MANUFACTURERS' EXTENSION.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$13,935	$13,935	$708	$708	$14,643	$14,643
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	2,890	2,890	.....	.....	2,890	2,890
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,814	1,362	.....	.....	1,814	1,362
6. Track and its appurtenances,	13,802	9,190	5,376	3,654	19,178	12,844
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$32,441	$27,377	$6,084	$4,362	$38,525	$31,739
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$32,739

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— MIDDLE BROOK.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$842	$842	.....	.....	$842	$842
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	3,330	3,330	.....	.....	3,330	3,330
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	431	348	.....	.....	431	348
6. Track and its appurtenances,	23,454	16,062	$1,912	$1,330	25,366	17,392
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	67	41	.....	.....	67	41
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$28,124	$20,623	$1,912	$1,330	$30,036	$21,953
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$22,953

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— MIDDLE VALLEY.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

DESCRIPTION.	MAIN STEM— 1. *Value New.*	MAIN STEM— 2. *Present Value.*	SECOND CLASS— 3. *Value New.*	SECOND CLASS— 4. *Present Value.*	5. VALUE NEW TOTAL.	6. PRESENT VALUE TOTAL.
1. Land,	$112	$112	.....	.....	$112	$112
2. Clearing and grubbing,	166	166	.....	.....	166	166
3. Graduation,	1,080	1,080	.....	.....	1,080	1,080
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	2,720	1,794	.....	.....	2,720	1,794
6. Track and its appurtenances,	8,445	5,689	.....	.....	8,445	5,689
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$12,523	$8,841	.....	.....	$12,523	$8,841
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$9,841

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— NAVESINK.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$33,749	$33,749	$21,841	$21,841	$55,590	$55,590
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	44,894	44,894	394	394	45,288	45,288
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	134,352	96,649	.....	.....	134,352	96,649
6. Track and its appurtenances,	87,157	61,718	3,287	2,300	90,444	64,018
7. Fencing,	129	97	287	206	416	303
8. Crossings, cattle guards, gates and signs,	2,631	1,867	.....	.....	2,631	1,867
9. Block signaling,	2,216	1,440	.....	.....	2,216	1,440
10. Interlocking,	4,450	2,892	.....	.....	4,450	2,892
11. Miscellaneous signals,	55	28	.....	.....	55	28
12. Passenger and freight stations,	.....	.....	18,531	13,570	18,531	13,570
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	156,190	109,300	156,190	109,300
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	4,101	2,871	1,233	910	5,334	3,781
21. Shop machinery, tools and appurtenances,	1,040	1,040	.....	.....	1,040	1,040
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$314,774	$247,245	$201,763	$148,521	$516,537	$395,766
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$396,766

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— NEW JERSEY SOUTHERN RAILWAY.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$402,455	$402,455	$81,312	$81,312	$483,767	$483,767
2. Clearing and grubbing,	24,596	24,596	.....	.....	24,596	24,596
3. Graduation,	207,930	207,930	3,588	3,588	211,518	211,518
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	95,788	65,473	270	189	96,058	65,662
6. Track and its appurtenances,	658,798	455,596	17,779	12,055	676,577	467,651
7. Fencing,	2,683	1,948	531	379	3,214	2,327
8. Crossings, cattle guards, gates and signs,	16,922	11,846	.....	.....	16,922	11,846
9. Block signaling,	15,496	10,073	.....	.....	15,496	10,073
10. Interlocking,	11,483	11,024	.....	.....	11,483	11,024
11. Miscellaneous signals,	494	252	.....	.....	494	252
12. Passenger and freight stations,	.....	.....	70,979	56,350	70,979	56,350
13. Shop buildings and engine houses,	2,940	1,377	32,728	20,860	35,668	22,237
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	1,502	1,202	29,302	20,210	30,804	21,412
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	164,808	129,854	14,186	9,785	178,994	139,639
21. Shop machinery, tools and appurtenances,	26,458	11,661	.....	.....	26,458	11,661
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$1,632,353	$1,335,287	$250,675	$204,728	$1,883,028	$1,540,015
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$1,541,015
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$39,000				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— NEW JERSEY TERMINAL.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$77,283	$77,283	$10,800	$10,800	$88,083	$88,083
2. Clearing and grubbing,	883	883	.....	.....	883	883
3. Graduation,	21,060	21,060	132	132	21,192	21,192
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	13,655	9,257	.....	.....	13,655	9,257
6. Track and its appurtenances,	57,765	40,191	1,800	1,241	59,565	41,432
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	64	42	.....	.....	64	42
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	5,004	3,450	5,004	3,450
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	3,264	2,285	.....	.....	3,264	2,285
21. Shop machinery, tools and appurtenances,	200	200	.....	.....	200	200
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$174,174	$151,201	$17,736	$15,623	$191,910	$166,824
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$167,824

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— NEW YORK AND LONG BRANCH.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$418,965	$418,965	$212,911	$212,911	$631,876	$631,876
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	307,635	307,635	2,897	2,897	310,532	310,532
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,307,627	1,148,307	49	34	1,307,676	1,148,341
6. Track and its appurtenances,	851,089	599,177	30,726	20,810	881,815	619,987
7. Fencing,	2,696	2,034	140	100	2,836	2,134
8. Crossings, cattle guards, gates and signs,	27,232	18,657	258	195	27,490	18,852
9. Block signaling,	62,316	40,505	.....	.....	62,316	40,505
10. Interlocking,	76,203	49,988	.....	.....	76,203	49,988
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	213,035	159,775	213,035	159,775
13. Shop buildings and engine houses,	.....	.....	6,119	4,050	6,119	4,050
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	10,502	9,450	10,502	9,450
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	40,109	24,768	38,386	29,255	78,495	54,023
21. Shop machinery, tools and appurtenances,	6,913	6,913	.....	.....	6,913	6,913
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$3,100,785	$2,616,949	$515,023	$439,477	$3,615,808	$3,056,426
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$3,057,426
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$54,755				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— OGDEN MINE.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$6,994	$6,994	$2,585	$2,585	$9,579	$9,579
2. Clearing and grubbing,	3,900	3,900	.....	.....	3,900	3,900
3. Graduation,	70,100	70,100	2,849	2,849	72,949	72,949
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	8,023	6,088	.....	.....	8,023	6,088
6. Track and its appurtenances,	69,024	46,785	17,915	12,188	86,939	58,973
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	230	136	.....	.....	230	136
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	4,984	4,220	4,984	4,220
13. Shop buildings and engine houses,	2,371	1,423	.....	.....	2,371	1,423
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	1,712	685	4,387	2,500	6,099	3,185
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,688	1,646	461	280	3,149	1,926
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$165,042	$137,757	$33,181	$24,622	$198,223	$162,379
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$163,379

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— RARITAN NORTH SHORE.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$11,486	$11,486	.....	.....	$11,486	$11,486
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	3,560	3,560	.....	.....	3,560	3,560
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	688	528	.....	.....	688	528
6. Track and its appurtenances,	15,949	10,733	.....	.....	15,949	10,733
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	17	11	.....	.....	17	11
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	$1,222	$975	1,222	975
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$31,700	$26,318	$1,222	$975	$32,922	$27,293
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$28,293

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— SOUND SHORE.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$64,709	$64,709	$1,000	$1,000	$65,709	$65,709
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	23,780	23,780	187	187	23,967	23,967
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	40,678	32,424	.....	.....	40,678	32,424
6. Track and its appurtenances,	44,992	30,727	5,527	3,788	50,519	34,515
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	105	64	.....	.....	105	64
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	1,637	1,359	.....	.....	1,637	1,359
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	1,740	1,250	1,740	1,250
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	508	406	.....	.....	508	406
21. Shop machinery, tools and appurtenances,	100	100	.....	.....	100	100
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$176,509	$153,569	$8,454	$6,225	$184,963	$159,794
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$160,794

SUMMARY SHEET.

Name of Railroad— TOMS RIVER.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$2,191	$2,191	$141	$141	$2,332	$2,332
2. Clearing and grubbing,	3,197	3,197	.....	.....	3,197	3,197
3. Graduation,	12,260	12,260	.....	.....	12,260	12,260
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	3,787	2,678	.....	.....	3,787	2,678
6. Track and its appurtenances,	53,287	38,076	175	121	53,462	38,197
7. Fencing,	.....	.....	87	65	87	65
8. Crossings, cattle guards, gates and signs,	174	112	.....	.....	174	112
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	7,798	5,910	7,798	5,910
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	103	52	.....	.....	103	52
21. Shop machinery, tools and appurtenances,	35	35	.....	.....	35	35
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$75,034	$58,601	$8,201	$6,237	$83,235	$64,838
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$65,838

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— TOMS RIVER AND BARNEGAT.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem		Second Class		5. Value New Total.	6. Present Value Total.
	1. *Value New.*	2. *Present Value.*	3. *Value New.*	4. *Present Value.*		
1. Land,	$6,748	$6,748	$609	$609	$7,357	$7,357
2. Clearing and grubbing,	2,571	2,571	.....	.....	2,571	2,571
3. Graduation,	24,130	24,130	.....	.....	24,130	24,130
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	3,575	2,597	.....	.....	3,575	2,597
6. Track and its appurtenances,	100,735	71,353	921	631	101,656	71,984
7. Fencing,	.....	.....	153	114	153	114
8. Crossings, cattle guards, gates and signs,	870	586	.....	.....	870	586
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	387	341	.....	.....	387	341
11. Miscellaneous signals,	119	61	.....	.....	119	61
12. Passenger and freight stations,	.....	.....	13,094	9,565	13,094	9,565
13. Shop buildings and engine houses,	.....	.....	910	550	910	550
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	6,420	5,800	6,420	5,800
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,282	1,555	.....	.....	2,282	1,555
21. Shop machinery, tools and appurtenances,	75	75	.....	.....	75	75
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$141,492	$110,017	$22,107	$17,269	$163,599	$127,286
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$128,286

SUMMARY SHEET.

Name of Railroad— VINELAND RAILROAD.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$76,027	$76,027	$30,206	$30,206	$106,233	$106,233
2. Clearing and grubbing,	7,074	7,074	.....	.....	7,074	7,074
3. Graduation,	86,580	86,580	1,573	1,573	88,153	88,153
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	35,588	29,043	344	310	35,932	29,353
6. Track and its appurtenances,	338,857	231,429	12,982	8,908	351,839	240,337
7. Fencing,	155	77	68	48	223	125
8. Crossings, cattle guards, gates and signs,	5,797	3,987	.....	.....	5,797	3,987
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	2,857	2,015	.....	.....	2,857	2,015
11. Miscellaneous signals,	477	243	.....	.....	477	243
12. Passenger and freight stations,	.....	.....	50,153	36,865	50,153	36,865
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	3,266	980	3,266	980
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	3,390	2,532	1,980	1,480	5,370	4,012
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	3,261	2,464	26,898	22,460	30,159	24,924
21. Shop machinery, tools and appurtenances,	1,070	1,070	.....	.....	1,070	1,070
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$561,133	$442,541	$127,470	$102,830	$688,603	$545,371
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$546,371

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.
SUMMARY SHEET.

Name of Railroad— VINELAND BRANCH.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$11,228	$11,228	$1,627	$1,627	$12,855	$12,855
2. Clearing and grubbing,	54	54	.....	.....	54	54
3. Graduation,	8,560	8,560	.....	.....	8,560	8,560
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	7,929	7,535	.....	.....	7,929	7,535
6. Track and its appurtenances,	22,886	15,577	974	666	23,860	16,243
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	45	42	.....	.....	45	42
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$50,702	$42,996	$2,601	$2,293	$53,303	$45,289
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$46,289

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— WEST END.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$52,118	$52,118	$8,514	$8,514	$60,632	$60,632
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	1,080	1,080	103	103	1,183	1,183
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,090	836	.....	.....	1,090	836
6. Track and its appurtenances,	25,515	18,033	476	334	25,991	18,367
7. Fencing,	34	29	.....	.....	34	29
8. Crossings, cattle guards, gates and signs,	4,445	3,156	.....	.....	4,445	3,156
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	1,556	1,245	1,556	1,245
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$84,282	$75,252	$10,649	$10,196	$94,931	$85,448
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$86,448

SUMMARY SHEET.

Name of Railroad— WEST SIDE CONNECTING.

Name of Railroad System— CENTRAL RAILROAD OF NEW JERSEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$44,069	$44,069	$1,000	$1,000	$45,069	$45,069
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	7,100	7,100	.....	.....	7,100	7,100
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	14,731	11,682	.....	.....	14,731	11,682
6. Track and its appurtenances,	14,574	9,910	1,946	1,362	16,520	11,272
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$80,474	$72,761	$2,946	$2,362	$83,420	$75,123
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$76,123

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$624,198	$624,198	$691,476	$691,476	$1,315,674	$1,315,674
2. Clearing and grubbing,	40,750	40,750	.....	.....	40,750	40,750
3. Graduation,	1,360,400	1,360,400	28,116	28,116	1,388,516	1,388,516
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,344,549	1,010,889	1,126	714	1,345,675	1,011,603
6. Track and its appurtenances,	3,928,287	2,807,673	372,066	253,524	4,300,353	3,061,197
7. Fencing,	47,310	34,290	228	153	47,538	34,443
8. Crossings, cattle guards, gates and signs,	32,016	22,025	131	80	32,147	22,105
9. Block signaling,	184,593	120,769	.....	.....	184,593	120,769
10. Interlocking,	150,718	111,640	.....	.....	150,718	111,640
11. Miscellaneous signals,	9,635	5,316	.....	.....	9,635	5,316
12. Passenger and freight stations,	.....	.....	343,070	252,648	343,070	252,648
13. Shop buildings and engine houses,	.....	.....	60,842	34,039	60,842	34,039
14. Docks and piers,	190,576	142,932	285,722	239,440	476,298	382,372
15. Telegraph and telephone lines,	134,646	100,987	.....	.....	134,646	100,987
16. Turn-tables, transfer tables, track scales and track cranes,	7,046	4,646	31,045	23,745	38,091	28,391
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	75,702	53,562	97,177	65,565	172,879	119,127
21. Shop machinery, tools and appurtenances,	19,264	11,302	.....	.....	19,264	11,302
22. Locomotives,	2,116,330	899,518	.....	.....	2,116,330	899,518
23. Passenger train equipment,	1,848,153	1,360,855	.....	.....	1,848,153	1,360,855
24. Freight train equipment,	852,780	580,480	.....	.....	852,780	580,480
25. Miscellaneous road equipment,	66,165	40,897	.....	.....	66,165	40,897
26. Floating or marine equipment,	43,000	33,752	.....	.....	43,000	33,752
27. Total value of tangible property,	$13,076,118	$9,366,881	$1,910,999	$1,589,500	$14,987,117	$10,956,381
Deduction on acct. Cape May, Delaware Bay & Sewells Point R. R.						66,316
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						$10,890,065 4,836,800
29. Total value of all items as above,						$15,726,865
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$10,000				

SUMMARY SHEET.

Name of Railroad— ATLANTIC CITY.

Name of Railroad System— PHILADELPHIA AND READING.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$314,802	$314,802	$245,170	$245,170	$559,972	$559,972
2. Clearing and grubbing,	37,703	37,703	.....	.....	37,703	37,703
3. Graduation,	472,350	472,350	24,688	24,688	497,038	497,038
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	404,153	326,377	941	566	405,094	326,943
6. Track and its appurtenances,	2,755,346	1,969,252	123,267	83,905	2,878,613	2,053,157
7. Fencing,	8,027	5,480	108	81	8,135	5,561
8. Crossings, cattle guards, gates and signs,	23,722	16,155	131	80	23,853	16,235
9. Block signaling,	117,367	82,056	.....	.....	117,367	82,056
10. Interlocking,	97,857	74,588	.....	.....	97,857	74,588
11. Miscellaneous signals,	7,054	3,923	.....	.....	7,054	3,923
12. Passenger and freight stations,	.....	.....	245,927	176,482	245,927	176,482
13. Shop buildings and engine houses,	.....	.....	19,328	7,800	19,328	7,800
14. Docks and piers,	.....	.....	27,692	16,590	27,692	16,590
15. Telegraph and telephone lines,	56,315	42,238	.....	.....	56,315	42,238
16. Turn-tables, transfer tables, track scales and track cranes,	3,086	1,566	27,246	21,520	30,332	23,086
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	36,629	26,605	68,554	43,870	105,183	70,475
21. Shop machinery, tools and appurtenances,	17,175	9,321	.....	.....	17,175	9,321
22. Locomotives,	1,426,800	444,307	.....	.....	1,426,800	444,307
23. Passenger train equipment,	1,151,100	868,455	.....	.....	1,151,100	868,455
24. Freight train equipment,	156,325	106,394	.....	.....	156,325	106,394
25. Miscellaneous road equipment,	57,980	36,308	.....	.....	57,980	36,308
26. Floating or marine equipment,	43,000	33,752	.....	.....	43,000	33,752
27. Total value of tangible property,	$7,186,791	$4,871,632	$783,052	$620,752	$7,969,843	$5,492,384
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$5,493,384
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property		$10,000				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— CAPE MAY, DELAWARE BAY AND SEWELL'S POINT.

Name of Railroad System— PHILADELPHIA AND READING.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$35,273	$35,273	$673	$673	$35,946	$35,946
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	4,270	4,270	.....	.....	4,270	4,270
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	8,310	6,063	.....	.....	8,310	6,063
6. Track and its appurtenances,	74,407	53,096	477	332	74,884	53,428
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	282	197	.....	.....	282	197
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	1,378	706	1,378	706
13. Shop buildings and engine houses,	.....	.....	35,282	22,789	35,282	22,789
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	442	332	.....	.....	442	332
16. Turn-tables, transfer tables, track scales and track cranes,	2,194	1,755	.....	.....	2,194	1,755
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	23,121	15,165	801	675	23,922	15,840
21. Shop machinery, tools and appurtenances,	235	127	.....	.....	235	127
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	63,900	46,370	.....	.....	63,900	46,370
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$212,434	$162,648	$38,611	$25,175	$251,045	$187,823
Amount recommended for assessment by Charles Hansel....						$121,507
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$122,507

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— DELAWARE AND BOUND BROOK.

Name of Railroad System— PHILADELPHIA AND READING.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$156,953	$156,953	$70,423	$70,423	$227,376	$227,376
2. Clearing and grubbing,	382	382	.....	.....	382	382
3. Graduation,	608,320	608,320	988	988	609,308	609,308
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	624,577	438,368	185	148	624,762	438,516
6. Track and its appurtenances,	806,560	576,680	19,059	12,993	825,619	589,673
7. Fencing,	30,348	22,123	120	72	30,468	22,195
8. Crossings, cattle guards, gates and signs,	6,821	4,873	.....	.....	6,821	4,873
9. Block signaling,	67,226	38,713	.....	.....	67,226	38,713
10. Interlocking,	47,821	33,272	.....	.....	47,821	33,272
11. Miscellaneous signals,	2,581	1,393	.....	.....	2,581	1,393
12. Passenger and freight stations,	.....	.....	93,319	73,625	93,319	73,625
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	70,986	53,240	.....	.....	70,986	53,240
16. Turn-tables, transfer tables, track scales and track cranes,	1,766	1,325	3,799	2,225	5,565	3,550
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	9,460	7,040	9,379	6,360	18,839	13,400
21. Shop machinery, tools and appurtenances,	1,015	1,015	.....	.....	1,015	1,015
22. Locomotives,	345,255	199,297	.....	.....	345,255	199,297
23. Passenger train equipment,	633,153	446,030	.....	.....	633,153	446,030
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	8,185	4,589	.....	.....	8,185	4,589
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$3,421,409	$2,593,613	$197,272	$166,834	$3,618,681	$2,760,447
28. Value of sub-division IV. "The value of remaining property, including the franchise."						1,000
29. Total value of all items as above,						$2,761,447

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— EAST TRENTON.

Name of Railroad System— PHILADELPHIA AND READING.

Description.	MAIN STEM— 1. Value New.	MAIN STEM— 2. Present Value.	SECOND CLASS— 3. Value New.	SECOND CLASS— 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$51,579	$51,579	$4,630	$4,630	$56,209	$56,209
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	1,720	1,720	.....	.....	1,720	1,720
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	772	618	.....	.....	772	618
6. Track and its appurtenances,	29,661	19,856	4,220	2,854	33,881	22,710
7. Fencing,	105	63	.....	.....	105	63
8. Crossings, cattle guards, gates and signs,	201	100	.....	.....	201	100
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	2,446	1,835	2,446	1,835
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	19,725	12,965	.....	.....	19,725	12,965
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	25,830	17,367	.....	.....	25,830	17,367
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$129,593	$104,268	$11,296	$9,319	$140,889	$113,587
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						49,900
29. Total value of all items as above,						$163,487

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— PORT READING.

Name of Railroad System— PHILADELPHIA AND READING.

Description.	MAIN STEM 1. Value New.	MAIN STEM 2. Present Value.	SECOND CLASS 3. Value New.	SECOND CLASS 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$65,591	$65,591	$370,580	$370,580	$436,171	$436,171
2. Clearing and grubbing,	2,665	2,665	.....	.....	2,665	2,665
3. Graduation,	273,740	273,740	2,440	2,440	276,180	276,180
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	306,737	239,463	.....	.....	306,737	239,463
6. Track and its appurtenances,	262,313	188,789	225,043	153,440	487,356	342,229
7. Fencing,	8,830	6,624	.....	.....	8,830	6,624
8. Crossings, cattle guards, gates and signs,	990	700	.....	.....	990	700
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	5,040	3,780	.....	.....	5,040	3,780
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	6,232	3,450	6,232	3,450
14. Docks and piers,	190,576	142,932	258,030	222,850	448,606	365,782
15. Telegraph and telephone lines,	6,903	5,177	.....	.....	6,903	5,177
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	6,492	4,752	18,443	14,660	24,935	19,412
21. Shop machinery, tools and appurtenances,	839	839	.....	.....	839	839
22. Locomotives,	324,550	242,949	.....	.....	324,550	242,949
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	670,625	456,719	.....	.....	670,625	456,719
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$2,125,891	$1,634,720	$880,768	$767,420	$3,006,659	$2,402,140
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						4,783,900
29. Total value of all items as above,						$7,186,040

SUMMARY SHEET.

Name of Railroad—ERIE SYSTEM. **Name of Railroad System—ERIE RAILROAD.**

Description.	MAIN STEM 1. Value New.	MAIN STEM 2. Present Value.	SECOND CLASS 3. Value New.	SECOND CLASS 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$3,919,695	$3,919,695	$7,792,264	$7,792,264	$11,711,959	$11,711,959
2. Clearing and grubbing,	13,847	13,847	.....	.....	13,847	13,847
3. Graduation,	2,268,960	2,268,960	24,559	24,559	2,293,519	2,293,519
4. Tunnels,	1,114,300	1,002,850	.....	.....	1,114,300	1,002,850
5. Bridges, retaining walls and culverts,	2,844,525	2,343,475	173,866	145,235	3,018,391	2,488,710
6. Track and its appurtenances,	3,311,982	2,348,405	778,450	531,454	4,090,432	2,879,859
7. Fencing,	24,837	19,546	25,859	23,518	50,696	43,064
8. Crossings, cattle guards, gates and signs,	110,582	76,911	6,648	4,360	117,230	81,271
9. Block signaling,	145,399	128,290	.....	.....	145,399	128,290
10. Interlocking,	326,394	264,940	.....	.....	326,394	264,940
11. Miscellaneous signals,	10,316	6,882	.....	.....	10,316	6,882
12. Passenger and freight stations,	.....	.....	872,760	664,195	872,760	664,195
13. Shop buildings and engine houses,	.....	.....	437,462	238,560	437,462	238,560
14. Docks and piers,	149,996	90,000	1,666,715	979,330	1,816,711	1,069,330
15. Telegraph and telephone lines,	81,094	60,821	.....	.....	81,094	60,821
16. Turn-tables, transfer tables, track scales and track cranes,	10,221	6,806	59,149	36,205	69,370	43,011
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	77,508	49,280	77,508	49,280
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	32,621	22,761	241,257	145,940	273,878	168,701
21. Shop machinery, tools and appurtenances,	249,619	159,799	.....	.....	249,619	159,799
22. Locomotives,	922,060	627,000	.....	.....	922,060	627,000
23. Passenger train equipment,	1,411,765	960,000	.....	.....	1,411,765	960,000
24. Freight train equipment,	701,030	476,700	.....	.....	701,030	476,700
25. Miscellaneous road equipment,	70,510	47,948	.....	.....	70,510	47,948
26. Floating or marine equipment,	3,588,200	2,225,592	.....	.....	3,588,200	2,225,592
27. Total value of tangible property,	$21,307,953	$17,071,228	$12,156,497	$10,634,900	$33,464,450	$27,706,128
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						3,510,500
29. Total value of all items as above,						$31,216,628
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property		$533,581				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— **ARLINGTON.**

Name of Railroad System— **ERIE RAILROAD.**

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$5,350	$5,350	.....	.....	$5,350	$5,350
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	3,240	3,240	.....	.....	3,240	3,240
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	770	539	.....	.....	770	539
6. Track and its appurtenances,	5,933	4,179	.....	.....	5,933	4,179
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	4	3	.....	.....	4	3
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	38	29	.....	.....	38	29
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$15,335	$13,340	.....	.....	$15,335	$13,340
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						22,300
29. Total value of all items as above,						$35,640

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— BERGEN COUNTY.

Name of Railroad System— ERIE RAILROAD.

Description.	—Main Stem— 1. Value New.	2. Present Value.	—Second Class— 3. Value New.	4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$47,504	$47,504	$2,385	$2,385	$49,889	$49,889
2. Clearing and grubbing,	824	824	.....	.....	824	824
3. Graduation,	97,710	97,710	.....	.....	97,710	97,710
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	64,389	50,664	.....	.....	64,389	50,664
6. Track and its appurtenances,	207,001	147,229	6,934	4,859	213,935	152,088
7. Fencing,	167	116	.....	.....	167	116
8. Crossings, cattle guards, gates and signs,	3,871	2,601	.....	.....	3,871	2,601
9. Block signaling,	16,994	14,105	.....	.....	16,994	14,105
10. Interlocking,	7,961	5,215	.....	.....	7,961	5,215
11. Miscellaneous signals,	289	147	.....	.....	289	147
12. Passenger and freight stations,	.....	.....	4,137	2,930	4,137	2,930
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	9,285	6,964	.....	.....	9,285	6,964
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	5,244	3,375	.....	.....	5,244	3,375
21. Shop machinery, tools and appurtenances,	70	70	.....	.....	70	70
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$461,309	$376,524	$13,456	$10,174	$474,765	$386,698
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						443,000
29. Total value of all items as above,						$829,698

SUMMARY SHEET.

Name of Railroad— BERGEN AND DUNDEE.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem — 1. Value New.	Main Stem — 2. Present Value.	Second Class — 3. Value New.	Second Class — 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$26,867	$26,867	.....	.....	$26,867	$26,867
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	5,540	5,540	.....	.....	5,540	5,540
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	8,223	4,934	.....	.....	8,223	4,934
6. Track and its appurtenances,	21,634	14,986	$3,616	$2,460	25,250	17,446
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	842	619	.....	.....	842	619
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	3,060	2,300	3,060	2,300
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	40	40	.....	.....	40	40
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$63,146	$52,986	$6,676	$4,760	$69,822	$57,746
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						78,000
29. Total value of all items as above,						$135,746

SUMMARY SHEET.

Name of Railroad— CALDWELL RAILWAY.

Name of Railroad System— ERIE RAILROAD.

Description.	—MAIN STEM— 1. Value New.	2. Present Value.	—SECOND CLASS— 3. Value New.	4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$24,155	$24,155	$5,400	$5,400	$29,555	$29,555
2. Clearing and grubbing,	748	748	.....	.....	747	748
3. Graduation,	24,130	24,130	.....	.....	24,130	24,130
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	50,946	40,210	.....	.....	50,946	40,210
6. Track and its appurtenances,	33,781	23,981	.....	.....	33,781	23,981
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	810	572	.....	.....	810	572
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	8,396	6,530	8,396	6,530
13. Shop buildings and engine houses,	.....	.....	3,472	2,100	3,472	2,100
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	1,290	968	.....	.....	1,290	968
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	74	65	74	65
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,087	912	2,522	1,790	3,609	2,702
21. Shop machinery, tools and appurtenances,	95	95	.....	.....	95	95
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property.	$137,042	$115,771	$19,864	$15,885	$156,906	$131,656
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$132,656

SUMMARY SHEET.

Name of Railroad— DOCKS CONNECTING RAILWAY.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$44,804	$44,804	$143,130	$143,130	$187,934	$187,934
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	1,970	1,970	.....	.....	1,970	1,970
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	10,100	7,063	29,623	20,576	39,723	27,639
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$56,874	$53,837	$172,753	$163,706	$229,627	$217,543
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						145,900
29. Total value of all items as above,						$363,443

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— ERIE RAILROAD, LESSEE.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	.....	.....	.....	.....	.....	.....
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	.....	.....	.....	.....	.....	.....
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	$5,500	$5,500	.....	.....	$5,500	$5,500
22. Locomotives,	825,000	561,000	.....	.....	825,000	561,000
23. Passenger train equipment,	1,262,353	858,400	.....	.....	1,262,353	858,400
24. Freight train equipment,	686,765	467,000	.....	.....	686,765	467,000
25. Miscellaneous road equipment,	70,510	47,948	.....	.....	70,510	47,948
26. Floating or marine equipment,	3,588,200	2,225,592	.....	.....	3,588,200	2,225,592
27. Total value of tangible property,	$6,438,328	$4,165,440	.....	.....	$6,438,328	$4,165,440
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,	.....	$533,581				

SUMMARY SHEET.

Name of Railroad— ERIE TERMINALS.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem — 1. Value New.	Main Stem — 2. Present Value.	Second Class — 3. Value New.	Second Class — 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$164,651	$164,651	.....	.....	$164,651	$164,651
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	7,330	7,330	.....	.....	7,330	7,330
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	20,392	14,787	.....	.....	20,392	14,787
6. Track and its appurtenances,	18,997	13,081	.....	.....	18,997	13,081
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$211,370	$199,849	.....	.....	$211,370	$199,849
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$200,849

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— LONG DOCK COMPANY.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$800,708	$800,708	$4,874,993	$4,874,993	$5,675,701	$5,675,701
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	132,870	132,870	.....	.....	132,870	132,870
4. Tunnels,	598,500	538,650	.....	.....	598,500	538,650
5. Bridges, retaining walls and culverts,	324,512	270,622	139,887	121,139	464,399	391,761
6. Track and its appurtenances,	174,946	122,521	470,081	320,072	645,027	442,593
7. Fencing,	.....	.....	2,855	2,117	2,855	2,117
8. Crossings, cattle guards, gates and signs,	.....	.....	1,095	660	1,095	660
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	120,964	118,568	.....	.....	120,964	118,568
11. Miscellaneous signals,	671	342	.....	.....	671	342
12. Passenger and freight stations,	.....	.....	425,246	326,320	425,246	326,320
13. Shop buildings and engine houses,	.....	.....	302,490	154,685	302,490	154,685
14. Docks and piers,	.....	.....	823,818	449,320	823,818	449,320
15. Telegraph and telephone lines,	6,928	5,196	.....	.....	6,928	5,196
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	30,258	18,520	30,258	18,520
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	77,508	49,280	77,508	49,280
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,811	1,796	142,967	93,075	145,778	94,871
21. Shop machinery, tools and appurtenances,	218,891	134,964	.....	.....	218,891	134,964
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$2,381,801	$2,126,237	$7,291,198	$6,410,181	$9,672,999	$8,536,418
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						583,200
29. Total value of all items as above,						$9,119,618

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— NEWARK AND HUDSON.

Name of Railroad System— ERIE RAILROAD.

Description.	MAIN STEM 1. Value New.	MAIN STEM 2. Present Value.	SECOND CLASS 3. Value New.	SECOND CLASS 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$129,656	$129,656	$22,637	$22,637	$152,293	$152,293
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	91,060	91,060	278	278	91,338	91,338
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	115,319	83,826	144	101	115,463	83,927
6. Track and its appurtenances,	101,068	71,055	6,753	4,600	107,821	75,655
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	2,157	1,561	2,937	1,920	5,094	3,481
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	31,392	26,867	.....	.....	31,392	26,867
11. Miscellaneous signals,	392	200	.....	.....	392	200
12. Passenger and freight stations,	.....	.....	3,445	2,680	3,445	2,680
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	1,563	1,172	.....	.....	1,563	1,172
16. Turn-tables, transfer tables, track scales and track cranes,	2,541	1,634	375	280	2,916	1,914
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	882	644	.....	.....	882	644
21. Shop machinery, tools and appurtenances,	30	30	.....	.....	30	30
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$476,060	$407,705	$36,569	$32,496	$512,629	$440,201
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						46,700
29. Total value of all items as above,						$486,901

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—
NEW JERSEY AND NEW YORK.

Name of Railroad System—
ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$117,543	$117,543	$20,800	$20,800	$138,343	$138,343
2. Clearing and grubbing,	1,098	1,098	.....	.....	1,098	1,098
3. Graduation,	58,260	58,260	.....	.....	58,260	58,260
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	22,466	18,134	.....	.....	22,466	18,134
6. Track and its appurtenances,	248,431	176,981	1,189	814	249,620	177,795
7. Fencing,	247	148	.....	.....	247	148
8. Crossings, cattle guards, gates and signs,	10,555	7,298	.....	.....	10,555	7,298
9. Block signaling,	27,569	22,883	.....	.....	27,569	22,883
10. Interlocking,	5,853	4,858	.....	.....	5,853	4,858
11. Miscellaneous signals,	1,353	690	.....	.....	1,353	690
12. Passenger and freight stations,	.....	.....	55,400	39,385	55,400	39,385
13. Shop buildings and engine houses,	.....	.....	3,654	1,860	3,654	1,860
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	7,338	5,503	.....	.....	7,338	5,503
16. Turn-tables, transfer tables, track scales and track cranes,	2,568	1,926	.....	.....	2,568	1,926
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,510	1,085	903	640	2,413	1,725
21. Shop machinery, tools and appurtenances,	575	575	.....	.....	575	575
22. Locomotives,	97,060	66,000	.....	.....	97,060	66,000
23. Passenger train equipment,	149,412	101,600	.....	.....	149,412	101,600
24. Freight train equipment,	14,265	9,700	.....	.....	14,265	9,700
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$766,103	$594,282	$81,946	$63,499	$848,049	$657,781
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						999,200
29. Total value of all items as above,						$1,656,981

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— NEW YORK AND GREENWOOD LAKE RAILWAY.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$450,127	$450,127	$91,225	$91,225	$541,352	$541,352
2. Clearing and grubbing,	7,916	7,916	.....	.....	7,916	7,916
3. Graduation,	597,400	597,400	2,022	2,022	599,422	599,422
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	696,553	553,900	.....	.....	696,553	553,900
6. Track and its appurtenances,	620,296	439,848	21,308	14,397	641,604	454,245
7. Fencing	177	133	.....	.....	177	133
8. Crossings, cattle guards, gates and signs,	15,481	10,960	.....	.....	15,481	10,960
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	26,205	15,183	.....	.....	26,205	15,183
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	86,508	70,025	86,508	70,025
13. Shop buildings and engine houses,	.....	.....	8,992	5,360	8,992	5,360
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	11,856	8,892	.....	.....	11,856	8,892
16. Turn-tables, transfer tables, track scales and track cranes,	3,507	2,283	4,173	1,750	7,680	4,033
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	8,919	6,252	16,240	10,415	25,159	16,667
21. Shop machinery, tools and appurtenances,	1,035	1,035	.....	.....	1,035	1,035
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$2,439,472	$2,093,929	$230,468	$195,194	$2,669,940	$2,289,123
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$2,290,123

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—

NEW YORK, LAKE ERIE AND WESTERN
DOCKS IMPROVEMENT COMPANY.

Name of Railroad System—

ERIE RAILROAD.

Description.	Main Stem		Second Class		5. Value New Total.	6. Present Value Total.
	1. *Value New.*	2. *Present Value.*	3. *Value New.*	4. *Present Value.*		
1. Land,	$145,727	$145,727	$2,168,888	$2,168,888	$2,314,615	$2,314,615
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	10,180	10,180	4,137	4,137	14,317	14,317
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	24,616	16,444	121,946	84,383	146,562	100,827
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	22,991	16,780	22,991	16,780
13. Shop buildings and engine houses,	.....	.....	101,073	64,555	101,073	64,555
14. Docks and piers,	149,996	90,000	842,897	530,010	992,893	620,010
15. Telegraph and telephone lines,	308	231	.....	.....	308	231
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	11,697	9,920	11,697	9,920
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	65,147	31,835	65,147	31,835
21. Shop machinery, tools and appurtenances,	20,661	14,768	.....	.....	20,661	14,768
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$351,488	$277,350	$3,338,776	$2,910,508	$3,690,264	$3,187,858
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						482,200
29. Total value of all items as above,						$3,670,058

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—
NORTHERN RAILROAD COMPANY OF NEW JERSEY.

Name of Railroad System—
ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$111,066	$111,066	$37,594	$37,594	$148,660	$148,660
2. Clearing and grubbing,	499	499	.....	.....	499	499
3. Graduation,	85,170	85,170	485	485	85,655	85,655
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	34,471	23,597	362	272	34,833	23,869
6. Track and its appurtenances,	360,143	256,943	2,037	1,390	362,180	258,333
7. Fencing,	1,013	763	.....	.....	1,013	763
8. Crossings, cattle guards, gates and signs,	13,906	9,786	.....	.....	13,906	9,786
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	5,190	2,647	.....	.....	5,190	2,647
11. Miscellaneous signals,	1,193	608	.....	.....	1,193	608
12. Passenger and freight stations,	.....	.....	68,787	47,450	68,787	47,450
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	7,872	5,904	.....	.....	7,872	5,904
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	2,996	1,200	2,996	1,200
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,520	1,029	1,059	410	2,579	1,439
21. Shop machinery, tools and appurtenances,	590	590	.....	.....	590	590
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$622,633	$498,602	$113,320	$88,801	$735,953	$587,403
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						176,200
29. Total value of all items as above,						$763,603

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— PATERSON AND HUDSON RIVER.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$886,822	$886,822	$245,449	$245,449	$1,132,271	$1,132,271
2. Clearing and grubbing,	314	314	.....	.....	314	314
3. Graduation,	147,700	147,700	6,934	6,934	154,634	154,634
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	424,907	315,651	27,875	19,367	452,782	335,018
6. Track and its appurtenances,	514,100	365,689	63,723	43,138	577,823	408,827
7. Fencing,	15,498	12,232	1,921	1,466	17,419	13,698
8. Crossings, cattle guards, gates and signs,	18,392	12,496	401	280	18,793	12,776
9. Block signaling,	34,363	30,238	.....	.....	34,363	30,238
10. Interlocking,	37,097	19,795	.....	.....	37,097	19,795
11. Miscellaneous signals,	1,446	1,232	.....	.....	1,446	1,232
12. Passenger and freight stations,	.....	.....	71,358	55,910	71,358	55,910
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	11,741	8,806	.....	.....	11,741	8,806
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	3,691	1,800	3,691	1,800
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,137	1,422	1,017	645	3,154	2,067
21. Shop machinery, tools and appurtenances,	1,047	1,047	.....	.....	1,047	1,047
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$2,095,564	$1,803,444	$422,369	$374,989	$2,517,933	$2,178,433
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$2,179,433

SUMMARY SHEET.

Name of Railroad— PATERSON, NEWARK AND NEW YORK.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$214,247	$214,247	$50,676	$50,676	$264,923	$264,923
2. Clearing and grubbing,	648	648	.....	.....	648	648
3. Graduation,	48,970	48,970	.....	.....	48,970	48,970
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	85,375	66,754	2,943	2,207	88,318	68,961
6. Track and its appurtenances,	122,395	85,942	1,541	1,045	123,936	86,987
7. Fencing,	2,066	1,647	203	163	2,269	1,810
8. Crossings, cattle guards, gates and signs,	14,854	10,823	2,215	1,500	17,069	12,323
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	1,273	649	.....	.....	1,273	649
11. Miscellaneous signals,	1,053	537	.....	.....	1,053	537
12. Passenger and freight stations,	.....	.....	34,883	25,565	34,883	25,565
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	6,502	4,876	.....	.....	6,502	4,876
16. Turn-tables, transfer tables, track scales and track cranes,	1,605	963	.....	.....	1,605	963
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,293	1,600	315	180	2,608	1,780
21. Shop machinery, tools and appurtenances,	465	465	.....	.....	465	465
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$501,746	$438,121	$92,776	$81,336	$594,522	$519,457
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						38,700
29. Total value of all items as above,						$558,157

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— PATERSON AND RAMAPO.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$231,548	$231,548	$95,105	$95,105	$326,653	$326,653
2. Clearing and grubbing,	1,800	1,800	.....	.....	1,800	1,800
3. Graduation,	265,690	265,690	10,703	10,703	276,393	276,393
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	228,100	180,569	344	300	228,444	180,869
6. Track and its appurtenances,	612,863	438,619	41,619	28,214	654,482	466,833
7. Fencing,	5,509	4,391	117	70	5,626	4,461
8. Crossings, cattle guards, gates and signs,	18,290	12,379	.....	.....	18,290	12,379
9. Block signaling,	39,774	34,954	.....	.....	39,774	34,954
10. Interlocking,	64,747	46,353	.....	.....	64,747	46,353
11. Miscellaneous signals,	1,617	1,422	.....	.....	1,617	1,422
12. Passenger and freight stations,	.....	.....	69,577	54,035	69,577	54,035
13. Shop buildings and engine houses,	.....	.....	13,261	7,300	13,261	7,300
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	15,040	11,280	.....	.....	15,040	11,280
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	1,926	1,100	1,926	1,100
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	4,795	3,607	11,087	6,950	15,882	10,557
21. Shop machinery, tools and appurtenances,	360	360	.....	.....	360	360
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$1,490,133	$1,232,972	$243,739	$203,777	$1,733,872	$1,436,749
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						488,100
29. Total value of all items as above,						$1,924,849

SUMMARY SHEET.

Name of Railroad— PENHORN CREEK.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$311,422	$311,422	.....	.....	$311,422	$311,422
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	658,600	658,600	.....	.....	658,600	658,600
4. Tunnels,	515,800	464,200	.....	.....	515,800	464,200
5. Bridges, retaining walls and culverts,	743,658	700,826	.....	.....	743,658	700,826
6. Track and its appurtenances,	153,196	106,659	.....	.....	153,196	106,659
7. Fencing,	.....	.....	$20,763	$19,702	20,763	19,702
8. Crossings, cattle guards, gates and signs,	120	60	.....	.....	120	60
9. Block signaling,	26,699	26,110	.....	.....	26,699	26,110
10. Interlocking,	23,861	23,861	.....	.....	23,861	23,861
11. Miscellaneous signals,	1,552	1,366	.....	.....	1,552	1,366
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$2,434,908	$2,293,104	$20,763	$19,702	$2,455,671	$2,312,806
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$2,313,806

RAILROAD AND CANAL REVAVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— ROSELAND RAILWAY.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem — 1. Value New.	Main Stem — 2. Present Value.	Second Class — 3. Value New.	Second Class — 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$10,584	$10,584	$5,100	$5,100	$15,684	$15,684
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	5,430	5,430	.....	.....	5,430	5,430
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	2,064	1,454	.....	.....	2,064	1,454
6. Track and its appurtenances,	15,772	10,926	231	158	16,003	11,084
7. Fencing,	20	15	.....	.....	20	15
8. Crossings, cattle guards, gates and signs,	198	116	.....	.....	198	116
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	3,426	2,500	3,426	2,500
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	254	191	.....	.....	254	191
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	2,033	800	2,033	800
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	50	50	.....	.....	50	50
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$34,372	$28,766	$10,790	$8,558	$45,162	$37,324
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$38,324

SUMMARY SHEET.

Name of Railroad— WATCHUNG.

Name of Railroad System— ERIE RAILROAD.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$196,914	$196,914	$28,882	$28,882	$225,796	$225,796
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	27,710	27,710	.....	.....	27,710	27,710
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	22,380	17,008	2,311	1,849	24,691	18,857
6. Track and its appurtenances,	66,710	46,259	7,849	5,348	74,559	51,607
7. Fencing,	140	101	.....	.....	140	101
8. Crossings, cattle guards, gates and signs,	11,102	7,637	.....	.....	11,102	7,637
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	1,851	944	.....	.....	1,851	944
11. Miscellaneous signals,	750	338	.....	.....	750	338
12. Passenger and freight stations,	.....	.....	15,546	11,785	15,546	11,785
13. Shop buildings and engine houses,	.....	.....	4,520	2,700	4,520	2,700
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	1,117	838	.....	.....	1,117	838
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	1,926	770	1,926	770
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,385	1,010	.....	.....	1,385	1,010
21. Shop machinery, tools and appurtenances,	210	210	.....	.....	210	210
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$330,269	$298,969	$61,034	$51,334	$391,303	$350,303
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$351,303

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— DELAWARE, LACKAWANNA AND WESTERN RAILROAD.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$2,478,191	$2,478,191	$9,509,703	$9,509,703	$11,987,894	$11,987,894
2. Clearing and grubbing,	27,480	27,480	.....	.....	27,480	27,480
3. Graduation,	9,477,683	9,477,683	491,634	491,634	9,969,317	9,969,317
4. Tunnels,	2,408,700	2,174,440	.....	.....	2,408,700	2,174,440
5. Bridges, retaining walls and culverts,	6,951,943	6,227,257	266,041	213,492	7,217,984	6,440,749
6. Track and its appurtenances,	4,191,497	2,969,422	1,156,313	785,381	5,347,810	3,754,803
7. Fencing,	70,170	54,017	24,092	19,702	94,262	73,719
8. Crossings, cattle guards, gates and signs,	71,592	59,452	707	560	72,299	60,012
9. Block signaling,	275,834	220,762	.....	.....	275,834	220,762
10. Interlocking,	552,864	438,732	24,258	21,760	577,122	460,492
11. Miscellaneous signals,	3,632	2,611	.....	.....	3,632	2,611
12. Passenger and freight stations,	.....	.....	1,937,710	1,723,625	1,937,710	1,723,625
13. Shop buildings and engine houses,	1,313	657	1,259,045	960,290	1,260,358	960,947
14. Docks and piers,	.....	.....	1,852,913	1,464,370	1,852,913	1,464,370
15. Telegraph and telephone lines,	224,311	165,558	.....	.....	224,311	165,558
16. Turn-tables, transfer tables, track scales and track cranes,	3,688	3,043	151,667	112,215	155,355	115,258
17. Pintsch gas plants,	.....	.....	46,010	38,000	46,010	38,000
18. Electric light plants,	.....	.....	230,232	176,825	230,232	176,825
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	90,688	72,460	688,599	491,275	779,287	563,735
21. Shop machinery, tools and appurtenances,	524,515	413,028	.....	.....	524,515	413,028
22. Locomotives,	2,418,735	1,397,486	.....	.....	2,418,735	1,397,486
23. Passenger train equipment,	2,747,440	1,687,755	.....	.....	2,747,440	1,687,755
24. Freight train equipment,	7,721,981	5,250,947	.....	.....	7,721,981	5,250,947
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	5,537,400	3,658,202	.....	.....	5,537,400	3,658,202
27. Total value of tangible property,	$45,779,657	$36,779,183	$17,638,924	$16,008,832	$63,418,581	$52,788,015
Deduction on account of Lackawanna R. R. of N. J., ...						4,620,732
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						$48,167,283 11,318,100

SUMMARY SHEET.

Name of Railroad—
DELAWARE, LACKAWANNA AND WESTERN RAILROAD, LESSEE.

Name of Railroad System—
DELAWARE, LACKAWANNA AND WESTERN RAILROAD, LESSEE.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	.....	.....	.....	.....	.....	.....
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	.....	.....	.....	.....	.....	.....
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	$2,399,835	$1,394,386	.....	.....	$2,399,835	$1,394,386
23. Passenger train equipment,	2,729,440	1,676,595	.....	.....	2,729,440	1,676,595
24. Freight train equipment,	7,721,981	5,250,947	.....	.....	7,721,981	5,250,947
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	5,537,400	3,658,202	.....	.....	5,537,400	3,658,202
27. Total value of tangible property,	$18,388,656	$11,980,130	.....	.....	$18,388,656	$11,980,130
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,	.....	$66,957				

SUMMARY SHEET.

Name of Railroad— CHESTER.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$3,246	$3,246	$402	$402	$3,648	$3,648
2. Clearing and grubbing,	3,230	3,230	.....	.....	3,230	3,230
3. Graduation,	32,050	32,050	.....	.....	32,050	32,050
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	15,788	13,196	.....	.....	15,788	13,196
6. Track and its appurtenances,	76,761	54,633	1,876	1,284	78,637	55,917
7. Fencing,	337	253	.....	.....	337	253
8. Crossings, cattle guards, gates and signs,	82	63	.....	.....	82	63
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	521	500	.....	.....	521	500
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	7,661	5,285	7,661	5,285
13. Shop buildings and engine houses,	1,313	657	.....	.....	1,313	657
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	3,083	2,312	.....	.....	3,083	2,312
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	4,499	3,350	4,499	3,350
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	353	232	.....	.....	353	232
21. Shop machinery, tools and appurtenances,	1,386	1,386	.....	.....	1,386	1,386
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$138,150	$111,758	$14,438	$10,321	$152,588	$122,079
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						575,000
29. Total value of all items as above,						$697,079

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— HOPATCONG.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$161	$161	.....	.....	$161	$161
2. Clearing and grubbing,	321	321	.....	.....	321	321
3. Graduation,	6,350	6,350	.....	.....	6,350	6,350
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	6,665	4,998	.....	.....	6,665	4,998
6. Track and its appurtenances,	14,870	10,038	$615	$421	15,485	10,459
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$28,367	$21,868	$615	$421	$28,982	$22,289
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						123,000
29. Total value of all items as above,						$145,289

SUMMARY SHEET.

Name of Railroad— LACKAWANNA RAILROAD OF NEW JERSEY.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$29,337	$29,337	.....	.....	$29,337	$29,337
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	5,361,740	5,361,740	.....	.....	5,361,740	5,361,740
4. Tunnels,	65,400	65,400	.....	.....	65,400	65,400
5. Bridges, retaining walls and culverts,	1,474,620	1,474,620	.....	.....	1,474,620	1,474,620
6. Track and its appurtenances,	.....	.....	.....	.....	.....	.....
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$6,931,097	$6,931,097	.....	.....	$6,931,097	$6,931,097
Amount of assessment made by State Board of Assessors,						$2,310,365
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$2,311,365

SUMMARY SHEET.

Name of Railroad— MORRIS AND ESSEX.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$2,060,575	$2,060,575	$9,400,504	$9,400,504	$11,461,079	$11,461,079
2. Clearing and grubbing,	15,550	15,550	.....	.....	15,550	15,550
3. Graduation,	2,841,708	2,841,708	4,661,108	4,661,108	3,302,816	3,302,816
4. Tunnels,	1,952,900	1,757,700	.....	.....	1,952,900	1,757,700
5. Bridges, retaining walls and culverts,	4,610,523	4,029,457	218,241	190,775	4,828,764	4,220,232
6. Track and its appurtenances,	3,078,206	2,183,131	1,068,406	725,241	4,146,612	2,908,372
7. Fencing,	57,295	44,383	21,492	17,719	78,787	62,102
8. Crossings, cattle guards, gates and signs,	54,102	45,011	648	520	54,750	45,531
9. Block signaling,	186,132	143,725	.....	.....	186,132	143,725
10. Interlocking,	531,396	424,303	24,258	21,760	555,654	446,063
11. Miscellaneous signals,	2,226	1,613	.....	.....	2,226	1,613
12. Passenger and freight stations,	.....	.....	1,724,398	1,550,585	1,724,398	1,550,585
13. Shop buildings and engine houses,	.....	.....	1,236,004	943,990	1,236,004	943,990
14. Docks and piers,	.....	.....	1,852,913	1,464,370	1,852,913	1,464,370
15. Telegraph and telephone lines,	180,740	132,879	.....	.....	180,740	132,879
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	116,126	87,270	116,126	87,270
17. Pintsch gas plants,	.....	.....	46,010	38,000	46,010	38,000
18. Electric light plants,	.....	.....	230,232	176,825	230,232	176,825
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	68,458	54,492	668,321	480,920	736,779	535,412
21. Shop machinery, tools and appurtenances,	491,932	380,445	.....	.....	491,932	380,445
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$16,131,743	$14,114,972	$17,068,661	$15,559,587	$33,200,404	$29,674,559
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						6,894,700
29. Total value of all items as above,						$36,569,259

SUMMARY SHEET.

Name of Railroad— MORRIS AND ESSEX EXTENSION.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$121,795	$121,795	$34,140	$34,140	$155,935	$155,935
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	40,270	40,270	3,985	3,985	44,255	44,255
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	11,615	9,295	.....	.....	11,615	9,295
6. Track and its appurtenances,	47,838	32,625	23,934	16,291	71,772	48,916
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	3,609	2,996	.....	.....	3,609	2,996
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	12,883	8,350	12,883	8,350
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	6,891	4,695	6,891	4,695
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	377	289	5,535	2,730	5,912	3,019
21. Shop machinery, tools and appurtenances,	1,687	1,687	.....	.....	1,687	1,687
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$227,191	$208,957	$87,368	$70,191	$314,559	$279,148
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						341,500
29. Total value of all items as above,						$620,648

SUMMARY SHEET.

Name of Railroad— NEWARK AND BLOOMFIELD.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$162,962	$162,962	$55,206	$55,206	$218,168	$218,168
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	79,590	79,590	11,538	11,538	91,128	91,128
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	193,372	167,658	.....	.....	193,372	167,658
6. Track and its appurtenances,	95,014	66,319	16,293	10,953	111,307	77,272
7. Fencing,	3,580	2,750	2,419	1,847	5,999	4,597
8. Crossings, cattle guards, gates and signs,	6,943	5,780	59	40	7,002	5,820
9. Block signaling,	7,353	6,049	.....	.....	7,353	6,049
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	174	89	.....	.....	174	89
12. Passenger and freight stations,	.....	.....	78,010	65,690	78,010	65,690
13. Shop buildings and engine houses,	.....	.....	6,403	4,300	6,403	4,300
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	2,696	2,022	.....	.....	2,696	2,022
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	5,446	4,100	5,446	4,100
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,318	1,088	8,052	2,400	9,370	3,488
21. Shop machinery, tools and appurtenances,	5,202	5,202	.....	.....	5,202	5,202
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$558.204	$499,509	$183,426	$156,074	$741,630	$655,583
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						27,900
29. Total value of all items as above,						$683,483

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— PASSAIC AND DELAWARE.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$28,047	$28,047	$5,023	$5,023	$33,070	$33,070
2. Clearing and grubbing,	1,606	1,606	.....	.....	1,606	1,606
3. Graduation,	152,860	152,860	7,519	7,519	160,379	160,379
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	73,242	58,799	.....	.....	73,242	58,799
6. Track and its appurtenances,	152,645	107,811	8,216	5,682	160,861	113,493
7. Fencing,	57	43	181	136	238	179
8. Crossings, cattle guards, gates and signs,	2,842	2,328	.....	.....	2,842	2,328
9. Block signaling,	29,140	26,660	.....	.....	29,140	26,660
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	284	212	.....	.....	284	212
12. Passenger and freight stations,	.....	.....	49,173	41,380	49,173	41,380
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	7,556	5,667	.....	.....	7,556	5,667
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,680	2,246	150	120	2,830	2,366
21. Shop machinery, tools and appurtenances,	4,421	4,421	.....	.....	4,421	4,421
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$455,380	$390,700	$70,262	$59,860	$525,642	$450,560
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						721,600
29. Total value of all items as above,						$1,172,160

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—
PASSAIC AND DELAWARE EXTENSION.

Name of Railroad System—
DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$22,603	$22,603	$1,654	$1,654	$24,257	$24,257
2. Clearing and grubbing,	256	256	.....	.....	256	256
3. Graduation,	82,615	82,615	2,351	2,351	84,966	84,966
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	51,818	43,701	.....	.....	51,818	43,701
6. Track and its appurtenances,	76,735	54,289	3,008	2,087	79,743	56,376
7. Fencing,	1,205	803	.....	.....	1,205	803
8. Crossings, cattle guards, gates and signs,	690	564	.....	.....	690	564
9. Block signaling,	14,081	12,852	.....	.....	14,081	12,852
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	71	53	.....	.....	71	53
12. Passenger and freight stations,	.....	.....	9,871	7,725	9,871	7,725
13. Shop buildings and engine houses,	.....	.....	6,542	4,350	6,542	4,350
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	3,958	2,969	.....	.....	3,958	2,969
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	4,499	3,350	4,499	3,350
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	517	444	2,397	1,675	2,914	2,119
21. Shop machinery, tools and appurtenances,	2,163	2,163	.....	.....	2,163	2,163
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$256,712	$223,312	$30,322	$23,192	$287,034	$246,504
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						316,500
29. Total value of all items as above,						$563,004

SUMMARY SHEET.

Name of Railroad— ROCKAWAY RIVER AND MONTVILLE.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$259	$259	.....	.....	$259	$259
2. Clearing and grubbing,	206	206	.....	.....	206	206
3. Graduation,	6,620	6,620	.....	.....	6,620	6,620
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	13,747	9,304	2,634	1,793	16,381	11,097
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	403	302	.....	.....	403	302
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$21,235	$16,691	$2,634	$1,793	$23,869	$18,484
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$19,484

SUMMARY SHEET.

Name of Railroad— SUSSEX.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$29,965	$29,965	$4,932	$4,932	$34,897	$34,897
2. Clearing and grubbing,	3,777	3,777	.....	.....	3,777	3,777
3. Graduation,	236,960	236,960	2,248	2,248	239,208	239,208
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	115,837	89,618	7,761	5,255	123,598	94,873
6. Track and its appurtenances,	296,296	210,910	24,605	16,996	320,901	227,906
7. Fencing,	5,782	4,349	.....	.....	5,782	4,349
8. Crossings, cattle guards, gates and signs,	1,487	1,186	.....	.....	1,487	1,186
9. Block signaling,	20,152	19,058	.....	.....	20,152	19,058
10. Interlocking,	3,577	2,942	.....	.....	3,577	2,942
11. Miscellaneous signals,	409	293	.....	.....	409	293
12. Passenger and freight stations,	.....	.....	33,103	26,035	33,103	26,035
13. Shop buildings and engine houses,	.....	.....	10,096	7,650	10,096	7,650
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	12,804	9,604	.....	.....	12,804	9,604
16. Turn-tables, transfer tables, track scales and track cranes,	1,844	1,476	9,724	7,050	11,568	8,526
17. Pintch Gas Plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	4,802	4,196	2,933	2,425	7,735	6,621
21. Shop machinery, tools and appurtenances,	6,424	6,424	.....	.....	6,424	6,424
22. Locomotives,	18,900	3,100	.....	.....	18,900	3,100
23. Passenger train equipment,	18,000	11,160	.....	.....	18,000	11,160
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$777,016	$635,018	$95,402	$72,591	$872,418	$707,609
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,663,300
29. Total value of all items as above,						$2,370,909

SUMMARY SHEET.

Name of Railroad— WARREN.

Name of Railroad System— DELAWARE, LACKAWANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$19,241	$19,241	$7,842	$7,842	$27,083	$27,083
2. Clearing and grubbing,	2,534	2,534	.....	.....	2,534	2,534
3. Graduation,	636,920	636,920	2,885	2,885	639,805	639,805
4. Tunnels,	390,400	351,340	.....	.....	390,400	351,340
5. Bridges, retaining walls and culverts,	398,463	335,915	40,039	17,462	438,502	353,377
6. Track and its appurtenances,	339,385	240,362	6,726	4,633	346,111	244,995
7. Fencing,	1,914	1,436	.....	.....	1,914	1,436
8. Crossings, cattle guards, gates and signs,	1,837	1,524	.....	.....	1,837	1,524
9. Block signaling,	18,976	12,418	.....	.....	18,976	12,418
10. Interlocking,	17,370	10,987	.....	.....	17,370	10,987
11. Miscellaneous signals,	468	351	.....	.....	468	351
12. Passenger and freight stations,	.....	.....	22,611	18,575	22,611	18,575
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	13,071	9,803	.....	.....	13,071	9,803
16. Turn-tables, transfer tables, track scales and track cranes,	1,844	1,567	4482	2,400	6,326	3,967
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	12,183	9,473	1,211	1,005	13,394	10,478
21. Shop machinery, tools and appurtenances,	11,300	11,300	.....	.....	11,300	11,300
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$1,865,906	$1,645,171	$85,796	$54,802	$1,951,702	$1,699,973
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						652,600
29. Total value of all items as above,						$2,352,573

RAILROAD AND CANAL REVA LUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— NEW YORK, SUSQUEHANNA AND WESTERN.

Name of Railroad System— NEW YORK, SUSQUEHANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$599,001	$599,001	$577,017	$577,017	$1,176,018	$1,176,018
2. Clearing and grubbing,	22,173	22,173	.....	.....	22,173	22,173
3. Graduation,	1,294,160	1,294,160	20,600	20,600	1,314,760	1,314,760
4. Tunnels,	906,900	816,210	.....	.....	906,900	816,210
5. Bridges, retaining walls and culverts,	1,291,434	1,001,503	16,355	11,177	1,307,789	1,012,680
6. Track and its appurtenances,	1,635,392	1,146,539	110,747	76,903	1,746,139	1,223,442
7. Fencing,	19,760	13,819	2,310	1,648	22,070	15,467
8. Crossings, cattle guards, gates and signs,	28,173	17,169	26	20	28,199	17,189
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	24,070	16,402	.....	.....	24,070	16,402
11. Miscellaneous signals,	5,232	2,668	.....	.....	5,232	2,668
12. Passenger and freight stations,	.....	.....	139,677	94,332	139,677	94,332
13. Shop buildings and engine houses,	.....	.....	102,751	67,858	102,751	67,858
14. Docks and piers,	.....	.....	358,544	212,780	358,544	212,780
15. Telegraph and telephone lines,	60,572	45,429	.....	.....	60,572	45,429
16. Turn-tables, transfer tables, track scales and track cranes,	3,322	2,326	29,568	17,449	32,890	19,775
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	41,619	27,038	63,386	33,439	105,005	60,477
21. Shop machinery, tools and appurtenances,	31,024	17,990	.....	.....	31,024	17,990
22. Locomotives,	520,590	354,000	.....	.....	520,590	354,000
23. Passenger train equipment,	253,825	173,600	.....	.....	253,825	173,600
24. Freight train equipment,	295,660	201,050	.....	.....	295,660	201,050
25. Miscellaneous road equipment,	51,985	35,350	.....	.....	51,985	35,350
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$7,084,892	$5,786,427	$1,420,981	$1,113,223	$8,505,873	$6,899,650
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						367,000
29. Total value of all items as above,						$7,266,650
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$94,348				

SUMMARY SHEET.

Name of Railroad— HACKENSACK AND LODI.

Name of Railroad System— NEW YORK, SUSQUEHANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$2,648	$2,648	.....	.....	$2,648	$2,648
2. Clearing and grubbing,	136	136	.....	.....	136	136
3. Graduation,	1,270	1,270	.....	.....	1,270	1,270
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	141	127	.....	.....	141	127
6. Track and its appurtenances,	12,916	9,122	.....	.....	12,916	9,122
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	17	10	.....	.....	17	10
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	459	344	.....	.....	459	344
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$17,587	$13,657	.....	.....	$17,587	$13,657
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						38,600
29. Total value of all items as above,						$52,257

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RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— LODI BRANCH.

Name of Railroad System— NEW YORK, SUSQUEHANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$11,923	$11,923	$1,339	$1,339	$13,262	$13,262
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	1,530	1,530	.....	.....	1,530	1,530
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,077	808	.....	.....	1,077	808
6. Track and its appurtenances,	6,709	4,642	1,621	1,133	8,330	5,775
7. Fencing,	313	188	241	145	554	333
8. Crossings, cattle guards, gates and signs,	76	47	.....	.....	76	47
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	1,648	1,234	1,648	1,234
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	135	101	.....	.....	135	101
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,215	670	.....	.....	1,215	670
21. Shop machinery, tools and appurtenances,	15	15	.....	.....	15	15
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$22,993	$19,924	$4,849	$3,851	$27,842	$23,775
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						8,200
29. Total value of all items as above,						$31,975

SUMMARY SHEET.

Name of Railroad— MACOPIN.

Name of Railroad System— NEW YORK, SUSQUEHANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,009	$1,009	$161	$161	$1,170	$1,170
2. Clearing and grubbing,	852	852	.....	.....	852	852
3. Graduation,	10,390	10,390	1,498	1,498	11,888	11,888
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	254	178	.....	.....	254	178
6. Track and its appurtenances,	11,191	7,923	2,121	1,456	13,312	9,379
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	15	9	.....	.....	15	9
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$23,711	$20,361	$3,780	$3,115	$27,491	$23,476
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						39,800
29. Total value of all items as above,						$63,276

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— NEW YORK, SUSQUEHANNA AND WESTERN.

Name of Railroad System— NEW YORK, SUSQUEHANNA AND WESTERN.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$527,716	$527,716	$560,536	$560,536	$1,088,252	$1,088,252
2. Clearing and grubbing,	21,185	21,185	.....	.....	21,185	21,185
3. Graduation,	1,273,030	1,273,030	19,102	19,102	1,292,132	1,292,132
4. Tunnels,	906,900	816,210	.....	.....	906,900	816,210
5. Bridges, retaining walls and culverts,	1,284,146	996,267	12,930	8,939	1,297,076	1,005,206
6. Track and its appurtenances,	1,571,885	1,101,986	107,273	74,498	1,679,158	1,176,484
7. Fencing,	19,447	13,631	2,069	1,503	21,516	15,134
8. Crossings, cattle guards, gates and signs,	27,528	16,767	26	20	27,554	16,787
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	24,070	16402	.....	.....	24,070	16,402
11. Miscellaneous signals,	5,232	2,668	.....	.....	5,232	2,668
12. Passenger and freight stations,	.....	.....	134,940	91,244	134,940	91,244
13. Shop buildings and engine houses,	.....	.....	102,751	67,858	102,751	67,858
14. Docks and piers,	.....	.....	358,544	212,780	358,544	212,780
15. Telegraph and telephone lines,	59,162	44,372	.....	.....	59,162	44,372
16. Turn-tables, transfer tables, track scales and track cranes,	3,322	2,326	29,568	17,449	32,890	19,775
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	39,814	25,958	63,386	33,439	103,200	59,397
21. Shop machinery, tools and appurtenances,	30,989	17,955	.....	.....	30,989	17,955
22. Locomotives,	520,590	354,000	.....	.....	520,590	354,000
23. Passenger train equipment,	253,825	173,600	.....	.....	253,825	173,600
24. Freight train equipment,	295,660	201,050	.....	.....	295,660	201,050
25. Miscellaneous road equipment,	51,985	35,350	.....	.....	51,985	35,350
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$6,916,486	$5,640,473	$1,391,125	$1,087,368	$8,307,611	$6,727,841
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						252,100
29. Total value of all items as above,						$6,979,941
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$94,348				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— PASSAIC AND NEW YORK.

Name of Railroad System— NEW YORK, SUSQUEHANNA AND WESTERN.

Description.	—Main Stem— 1. Value New.	2. Present Value.	—Second Class— 3. Value New.	4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$55,705	$55,705	$14,981	$14,981	$70,686	$70,686
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	7,940	7,940	.....	.....	7,940	7,940
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	5,816	4,123	1,304	782	7,120	4,905
6. Track and its appurtenances,	32,691	22,866	1,853	1,272	34,544	24,138
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	537	336	.....	.....	537	336
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	3,089	1,854	3,089	1,854
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	816	612	.....	.....	816	612
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	590	410	.....	.....	590	410
21. Shop machinery, tools and appurtenances,	20	20	.....	.....	20	20
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,						
27. Total value of tangible property,	$104,115	$92,012	$21,227	$18,889	$125,342	$110,901
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						28,300
29. Total value of all items as above,						$139,201

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— LEHIGH VALLEY SYSTEM. Name of Railroad System— LEHIGH VALLEY.

Description.	MAIN STEM 1. Value New.	MAIN STEM 2. Present Value.	SECOND CLASS 3. Value New.	SECOND CLASS 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$2,672,466	$2,672,466	$6,156,369	$6,156,369	$8,828,835	$8,828,835
2. Clearing and grubbing,	25,818	25,818	.....	.....	25,818	25,818
3. Graduation,	4,853,310	4,853,310	292,057	292,057	5,145,367	5,145,367
4. Tunnels,	805,900	725,310	.....	.....	805,900	725,310
5. Bridges, retaining walls and culverts,	4,338,044	3,378,464	65,022	54,269	4,403,066	3,432,733
6. Track and its appurtenances,	3,153,887	2,213,459	985,808	682,849	4,139,695	2,896,308
7. Fencing,	15,798	9,635	4,893	3,616	20,691	13,251
8. Crossings, cattle guards, gates and signs,	17,895	12,295	7,223	5,237	25,118	17,532
9. Block signaling,	161,171	97,587	.....	.....	161,171	97,587
10. Interlocking,	129,302	80,444	.....	.....	129,302	80,444
11. Miscellaneous signals,	1,859	948	.....	.....	1,859	948
12. Passenger and freight stations,	.....	.....	220,032	160,230	220,032	160,230
13. Shop buildings and engine houses,	8,157	7,749	115,681	65,818	123,838	73,567
14. Docks and piers,	174,599	116,038	2,694,266	1,690,766	2,868,865	1,806,804
15. Telegraph and telephone lines,	92,858	69,644	.....	.....	92,858	69,644
16. Turn-tables, transfer tables, track scales and track cranes,	4,115	3,331	34,911	26,233	39,026	29,564
17. Pintsch gas plants,	.....	.....	26,750	20,000	26,750	20,000
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	67,201	46,600	67,201	46,600
20. Miscellaneous structures,	1,579,243	680,826	796,758	467,369	2,376,001	1,148,195
21. Shop machinery, tools and appurtenances,	47,735	26,813	.....	.....	47,735	26,813
22. Locomotives,	839,900	456,382	.....	.....	839,900	456,382
23. Passenger train equipment,	556,856	330,433	.....	.....	556,856	330,433
24. Freight train equipment,	5,498,560	3,739,021	.....	.....	5,498,560	3,739,021
25. Miscellaneous road equipment,	118,490	74,805	.....	.....	118,490	74,805
26. Floating or marine equipment,	3,357,516	2,132,409	.....	.....	3,357,516	2,132,409
27. Total value of tangible property,	$28,453,479	$21,707,187	$11,466,971	$9,671,413	$39,920,450	$31,378,600
Deductions on account Morris Canal & Banking Co.,						942,907
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						$30,435,693 7,105,700
29. Total value of all items as above,						$37,541,393
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property		$218,424				

SUMMARY SHEET.

Name of Railroad— BAY SHORE CONNECTING.

Name of Railroad System— LEHIGH VALLEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$4,265	$4,265	.....	.....	$4,265	$4,265
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	9,830	9,830	.....	.....	9,830	9,830
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	2,304	1,728	61	55	2,365	1,783
6. Track and its appurtenances,	7,454	5,081	9,656	6,632	17,110	11,713
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	59	30	.....	.....	59	30
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$23,912	$20,934	$9,717	$6,687	$33,629	$27,621
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$28,621

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad—LEHIGH VALLEY RAILROAD CO. OF NEW JERSEY. Name of Railroad System—LEHIGH VALLEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,848,823	$1,848,823	$4,860,694	$4,860,694	$6,709,517	$6,709,517
2. Clearing and grubbing,	7,558	7,558	.....	.....	7,558	7,558
3. Graduation,	2,493,540	2,493,540	292,057	292,057	2,785,597	2,785,597
4. Tunnels,	805,900	725,310	.....	.....	805,900	725,310
5. Bridges, retaining walls and culverts,	4,008,855	3,225,096	64,961	54,214	4,073,816	3,279,310
6. Track and its appurtenances,	3,146,433	2,208,378	976,152	676,217	4,122,585	2,884,595
7. Fencing,	15,798	9,635	4,893	3,616	20,691	13,251
8. Crossings, cattle guards, gates and signs,	17,836	12,265	7,223	5,237	25,059	17,502
9. Block signaling,	161,171	97,587	.....	.....	161,171	97,587
10. Interlocking,	129,302	80,444	.....	.....	129,302	80,444
11. Miscellaneous signals,	1,859	948	.....	.....	1,859	948
12. Passenger and freight stations,	.....	.....	220,032	160,230	220,032	160,230
13. Shop buildings and engine houses,	8,157	7,749	115,681	65,818	123,838	73,567
14. Docks and piers,	174,599	116,038	2,694,266	1,690,766	2,868,865	1,806,804
15. Telegraph and telephone lines,	92,858	69,644	.....	.....	92,858	69,644
16. Turn-tables, transfer tables, track scales and track cranes,	4,115	3,331	34,911	26,233	39,026	29,564
17. Pintsch gas plants,	.....	.....	26,750	20,000	26,750	20,000
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	67,201	46,600	67,201	46,600
20. Miscellaneous structures,	52,663	38,002	702,708	434,404	755,371	472,406
21. Shop machinery, tools and appurtenances,	43,494	25,083	.....	.....	43,494	25,083
22. Locomotives,	839,900	456,382	.....	.....	839,900	456,382
23. Passenger train equipment,	556,856	330,433	.....	.....	556,856	330,433
24. Freight train equipment,	5,498,560	3,739,021	.....	.....	5,498,560	3,739,021
25. Miscellaneous road equipment,	118,490	74,805	.....	.....	118,490	74,805
26. Floating or marine equipment,	3,308,616	2,105,209	.....	.....	3,308,616	2,105,209
27. Total value of tangible property,	$23,335,383	$17,675,281	$10,067,529	$8,336,086	$33,402,912	$26,011,367
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						7,103,700
29. Total value of all items as above,						$33,115,067
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$218,424				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— MORRIS CANAL AND BANKING COMPANY.

Name of Railroad System— LEHIGH VALLEY.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$819,378	$819,378	$1,295,675	$1,295,675	$2,115,053	$2,115,053
2. Clearing and grubbing,	18,260	18,260	.....	.....	18,260	18,260
3. Graduation,	2,349,940	2,349,940	.....	.....	2,349,940	2,349,940
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	326,885	151,640	.....	.....	326,885	151,640
6. Track and its appurtenances,	.....	.....	.....	.....	.....	.....
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,526,580	642,824	94,050	32,965	1,620,630	675,789
21. Shop machinery, tools and appurtenances,	4,241	1,730	.....	.....	4,241	1,730
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	48,900	27,200	.....	.....	48,900	27,200
27. Total value of tangible property,	$5,094,184	$4,010,972	$1,389,725	$1,328,640	$6,483,909	$5,339,612
	Assessment made by State Board of Assessors.					4,396,705
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$4,397,705

SUMMARY SHEET.

Name of Railroad— ATLANTIC CITY AND OCEAN CITY.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$535	$535	.....	.....	$535	$535
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	11,130	11,130	.....	.....	11,130	11,130
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	108,716	86,782	.....	.....	108,716	86,782
6. Track and its appurtenances,	34,160	26,013	.....	.....	34,160	26,013
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	91	68	.....	.....	91	68
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	260	202	260	202
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	270	203	.....	.....	270	203
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	7,563	6,051	.....	.....	7,563	6,051
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$162,465	$130,782	$260	$202	$162,725	$130,984
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						556,100
29. Total value of all items as above,						$687,084

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— ATLANTIC CITY AND SHORE. **Name of Railroad System— UNCLASSIFIED.**

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$13,751	$13,751	$7,878	$7,878	$21,629	$21,629
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	16,890	16,890	.....	.....	16,890	16,890
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	133,354	106,506	.....	.....	133,354	106,506
6. Track and its appurtenances,	38,277	27,780	1,054	725	39,331	28,505
7. Fencing,	272	205	.....	.....	272	205
8. Crossings, cattle guards, gates and signs,	90	45	.....	.....	90	45
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	107	77	107	77
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	77	58	.....	.....	77	58
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	8,541	6,837	2,945	1,954	11,486	8,791
21. Shop machinery, tools and appurtenances,	4,640	2,991	.....	.....	4,640	2,991
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	394,100	264,640	.....	.....	394,100	264,640
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	15,950	10,100	.....	.....	15,950	10,100
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$625,942	$449,803	$11,984	$10,634	$637,926	$460,437
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						496,500
29. Total value of all items as above,						$956,937
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$750				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— BALTIMORE AND OHIO.

Name of Railroad System— UNCLASSIFIED.

Description.	MAIN STEM 1. Value New.	MAIN STEM 2. Present Value.	SECOND CLASS 3. Value New.	SECOND CLASS 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	.....	.....	.....	.....	.....	.....
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	.....	.....	.....	.....	.....	.....
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
29. Total value of all items as above,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	84,909	66,715	.....	.....	84,909	66,715
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$84,909	$66,715	.....	.....	$84,909	$66,715

SUMMARY SHEET.

Name of Railroad— BALTIMORE AND NEW YORK RAILWAY.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$77,535	$77,535	$8,547	$8,547	$86,082	$86,082
2. Clearing and grubbing,	240	240	.....	.....	240	240
3. Graduation,	46,000	46,000	2,433	2,433	48,433	48,433
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	141,164	96,855	.....	.....	141,164	96,855
6. Track and its appurtenances,	91,166	64,593	28,409	19,309	119,575	83,902
7. Fencing,	1,125	674	.....	.....	1,125	674
8. Crossings, cattle guards, gates and signs,	3,001	2,050	.....	.....	3,001	2,050
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	10,402	7,281	.....	.....	10,402	7,281
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	6,179	5,870	6,179	5,870
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,473	1,042	982	390	2,455	1,432
21. Shop machinery, tools and appurtenances,	120	120	.....	.....	120	120
22. Locomotives,	42,880	18,438	.....	.....	42,880	18,438
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	35	10	.....	.....	35	10
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$415,141	$314,838	$46,550	$36,549	$530,791	$351,387
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						381,200
29. Total value of all items as above,						$732,587

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— CHESAPEAKE AND OHIO RAILWAY.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	.....	.....	.....	.....	.....	.....
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	.....	.....	.....	.....	.....	.....
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	$14,330	$12,819	.....	.....	$14,330	$12,819
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$14,330	$12,819	.....	.....	$14,330	$12,819

SUMMARY SHEET.

Name of Railroad—
EAST JERSEY RAILROAD AND TERMINAL COMPANY.

Name of Railroad System—
UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$16,585	$16,585	.....	.....	$16,585	$16,585
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	600	600	482	482	1,082	1,082
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	249	187	249	187
6. Track and its appurtenances,	6,883	4534	10,224	6,783	17,107	11,317
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	2,052	1,026	.....	.....	2,052	1,026
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	1,605	800	1,605	800
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	310	248	.....	.....	310	248
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	16,400	12,190	.....	.....	16,400	12,190
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	31,121	23,474	.....	.....	31,121	23,474
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	75,500	46,656	.....	.....	75,500	46,656
27. Total value of tangible property,	$149,451	$105,313	$12,560	$8,252	$162,011	$113,565
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						52,600
29. Total value of all items as above,						$166,165

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad—

ELIZABETH AND TRENTON. Includes Trenton and New Brunswick R. R. Co., and New Jersey Short Line Railroad Company.

Name of Railroad System—

UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$33,910	$33,910	$1,135	$1,135	$35,045	$35,045
2. Clearing and grubbing,	2,000	2,000	.....	.....	2,000	2,000
3. Graduation,	137,939	137,939	.....	.....	137,939	137,939
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	111,002	100,230	.....	.....	111,002	100,230
6. Track and its appurtenances,	165,365	118,006	362	237	165,727	118,243
7. Fencing,	7,993	3,997	.....	.....	7,993	3,997
8. Crossings, cattle guards, gates and signs,	83,229	66,310	77	58	83,306	66,368
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	754	553	754	553
13. Shop buildings and engine houses,	.....	.....	56,925	34,159	56,925	34,159
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	2,008	1,506	.....	.....	2,008	1,506
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	706	423	.....	.....	706	423
21. Shop machinery, tools and appurtenances,	1,079	623	.....	.....	1,079	623
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	38,000	28,500	.....	.....	38,000	28,500
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	2,500	1,500	.....	.....	2,500	1,500
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$585,731	$494,944	$59,253	$36,142	$644,984	$531,086
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$532,086
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$789				

SUMMARY SHEET.

Name of Railroad— FERRO MONTE. **Name of Railroad System— UNCLASSIFIED.**

Description.	MAIN STEM— 1. Value New.	MAIN STEM— 2. Present Value.	SECOND CLASS— 3. Value New.	SECOND CLASS— 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$324	$324	$554	$554	$878	$878
2. Clearing and grubbing,	64	64	.....	.....	64	64
3. Graduation,	2,100	2,100	600	600	2,700	2,700
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	5,822	2,119	2,700	1,080	8,522	3,199
7. Fencing,	135	68	.....	.....	135	68
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	150	38	734	290	884	328
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$8,595	$4,713	$4,588	$2,524	$13,183	$7,237
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$8,237
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$994				

SUMMARY SHEET.

Name of Railroad— HOBOKEN MANUFACTURERS.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$22,684	$22,684	.....	.....	$22,684	$22,684
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	190	190	.....	.....	190	190
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	801	561	.....	.....	801	561
6. Track and its appurtenances,	872	625	.....	.....	872	625
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	135	108	.....	.....	135	108
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	31,600	22,812	.....	.....	31,600	22,812
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	6,250	1,563	.....	.....	6,250	1,563
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$62,532	$48,543	.....	.....	$62,532	$48,543
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$49,543

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—
HOBOKEN RAILROAD WAREHOUSE AND STEAMSHIP CONN. COMPANY.

Name of Railroad System—
UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$516,184	$516,184	$98,918	$98,918	$615,102	$615,102
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	111,920	111,920	.....	.....	111,920	111,920
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	46,018	33,048	7,868	5,478	53,886	38,526
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	83	62	.....	.....	83	62
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	7,740	5,443	7,740	5,443
13. Shop buildings and engine houses,	642	385	.....	.....	642	385
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	71	53	.....	.....	71	53
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	9,362	7,298	12,291	9,313	21,653	16,611
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$684,280	$668,950	$126,817	$119,152	$811,097	$788,102
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$789,102

SUMMARY SHEET.

Name of Railroad— HOPATCONG SHORE RAILROAD.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$583	$583	.....	.....	$583	$583
2. Clearing and grubbing,	118	118	.....	.....	118	118
3. Graduation,	1,400	1,400	.....	.....	1,400	1,400
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	8,629	6,197	.....	.....	8,629	6,197
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	118	94	.....	.....	118	94
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	460	345	.....	.....	460	345
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	4,194	3,357	.....	.....	4,194	3,357
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$15,502	$12,094	.....	.....	$15,502	$12,094
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$13,094

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— HUDSON AND MANHATTAN.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$28,405	$28,405	$251,442	$251,442	$279,847	$279,847
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	8,368,575	7,531,700	.....	.....	8,368,575	7,531,700
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	130,423	95,674	1,712	1,280	132,135	96,954
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	159,310	143,379	.....	.....	159,310	143,379
10. Interlocking,	158,591	143,071	.....	.....	158,591	143,071
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	138,030	110,400	138,030	110,400
13. Shop buildings and engine houses,	.....	.....	2,681,420	2,321,860	2,681,420	2,321,860
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	46,389	39,400	.....	.....	46,389	39,400
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	487,515	414,290	.....	.....	487,515	414,290
21. Shop machinery, tools and appurtenances,	49,411	42,236	.....	.....	49,411	42,236
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	1,001,000	881,342	.....	.....	1,001,000	881,342
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	6,160	5,245	.....	.....	6,160	5,245
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$10,435,779	$9,324,742	$3,072,604	$2,684,982	$13,508,383	$12,009,724
Amount recommended for assessment by Charles Hansel,						5,164,181
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$5,165,181

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— HUDSON R. R. AND TRANSPORTATION CO.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$27,266	$27,266	.....	.....	$27,266	$27,266
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	1,870	1,870	.....	.....	1,870	1,870
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	2,194	1,504	.....	.....	2,194	1,504
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$31,330	$30,640	.....	.....	$31,330	$30,640
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$31,640

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— LEHIGH AND HUDSON RIVER RAILWAY.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$39,291	$39,291	$10,561	$10,561	$49,852	$49,852
2. Clearing and grubbing,	307	307	.....	.....	307	307
3. Graduation,	262,550	262,550	16,113	16,113	278,663	278,663
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	133,173	105,937	8,659	3,950	141,832	109,887
6. Track and its appurtenances,	530,877	375,569	65,850	45,758	596,727	421,327
7. Fencing,	16,738	11,186	.....	.....	16,738	11,186
8. Crossings, cattle guards, gates and signs,	3,010	2,165	109	75	3,119	2,240
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	1,712	873	.....	.....	1,712	873
11. Miscellaneous signals,	413	211	.....	.....	413	211
12. Passenger and freight stations,	.....	.....	24,595	19,737	24,595	19,737
13. Shop buildings and engine houses,	4,437	1,984	639	130	5,076	2,114
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	10,845	7,592	.....	.....	10,845	7,592
16. Turn-tables, transfer tables, track scales and track cranes,	1,772	1,240	.....	.....	1,772	1,240
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	11,511	8,197	7,121	4,877	18,632	13,074
21. Shop machinery, tools and appurtenances,	1,297	918	.....	.....	1,297	918
22. Locomotives,	437,290	303,154	.....	.....	437,290	303,154
23. Passenger train equipment,	42,700	32,512	.....	.....	42,700	32,512
24. Freight train equipment,	413,840	296,483	.....	.....	413,840	296,483
25. Miscellaneous road equipment,	54,180	26,632	.....	.....	54,180	26,632
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$1,965,943	$1,476,801	$133,647	$101,201	$2,099,590	$1,578,002
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						2,132,900
29. Total value of all items as above,						$3,710,902

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— LEHIGH AND NEW ENGLAND.

Name of Railroad System— UNCLASSIFIED.

Description.	MAIN STEM 1. Value New.	MAIN STEM 2. Present Value.	SECOND CLASS 3. Value New.	SECOND CLASS 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$7,854	$7,854	$1,996	$1,996	$9,850	$9,850
2. Clearing and grubbing,	1,479	1,479	.....	.....	1,479	1,479
3. Graduation,	121,190	121,190	2,412	2,412	123,602	123,602
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	203,954	178,898	1,142	571	205,096	179,469
6. Track and its appurtenances,	169,052	118,615	9,294	6,363	178,346	124,978
7. Fencing,	8,267	5,787	83	58	8,350	5,845
8. Crossings, cattle guards, gates and signs,	426	261	.....	.....	426	261
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	856	612	.....	.....	856	612
11. Miscellaneous signals,	59	30	.....	.....	59	30
12. Passenger and freight stations,	.....	.....	6,737	4,185	6,737	4,185
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	7,509	5,632	.....	.....	7,509	5,632
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	5,177	3,883	5,177	3,883
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,446	1,114	424	167	2,870	1,281
21. Shop machinery, tools and appurtenances,	90	90	.....	.....	90	90
22. Locomotives,	43,064	32,994	.....	.....	43,064	32,994
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	166,220	141,762	.....	.....	166,220	141,762
25. Miscellaneous road equipment,	136	68	.....	.....	136	68
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$732,602	$616,386	$27,265	$19,635	$759,867	$636,021
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						43,800
29. Total value of all items as above,						$679,821

SUMMARY SHEET.

Name of Railroad— LUCASTON.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$109	$109	$21	$21	$130	$130
2. Clearing and grubbing,	856	856	.....	.....	856	856
3. Graduation,	2,360	2,360	.....	.....	2,360	2,360
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	9,315	6,592	1,300	891	10,615	7,483
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	32	16	1,070	749	1,102	765
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	850	680	.....	.....	850	680
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$13,522	$10,613	$2,391	$1,661	$15,913	$12,274
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$13,274

SUMMARY SHEET.

Name of Railroad— MORRISTOWN AND ERIE.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$17,602	$17,602	$14,565	$14,565	$32,167	$32,167
2. Clearing and grubbing,	3,901	3,901	.....	.....	3,901	3,901
3. Graduation,	64,380	64,380	1,197	1,197	65,577	65,577
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	48,517	39,993	2,420	2,178	50,937	42,171
6. Track and its appurtenances,	112,621	79,512	13,849	9,395	126,470	88,907
7. Fencing,	1,213	716	.....	.....	1,213	716
8. Crossings, cattle guards, gates and signs,	557	336	.....	.....	557	336
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	9,274	6,640	9,274	6,640
13. Shop buildings and engine houses,	.....	.....	2,231	1,375	2,231	1,375
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	3,624	2,718	.....	.....	3,624	2,718
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	3,459	2,710	493	280	3,952	2,990
21. Shop machinery, tools and appurtenances,	2,020	1,756	.....	.....	2,020	1,756
22. Locomotives,	27,600	15,166	.....	.....	27,600	15,166
23. Passenger train equipment,	4,000	1,500	.....	.....	4,000	1,500
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	170	90	.....	.....	170	90
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$289,664	$230,380	$44,029	$35,630	$333,693	$266,010
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						273,300
29. Total value of all items as above,						$539,310
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$1,560				

SUMMARY SHEET.

Name of Railroad— MOUNT HOPE MINERAL.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,008	$1,008	$115	$115	$1,123	$1,123
2. Clearing and grubbing,	950	950	.....	.....	950	950
3. Graduation,	21,050	21,050	644	644	21,694	21,694
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	7,947	5,856	.....	.....	7,947	5,856
6. Track and its appurtenances,	32,417	22,916	1,678	1,154	34,095	24,070
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	127	74	.....	.....	127	74
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	8,464	3,385	8,464	3,385
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	24	18	.....	.....	24	18
16. Turn-tables, transfer tables, track scales and track cranes,	2,343	1,703	.....	.....	2,343	1,703
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,599	842	695	350	2,294	1,192
21. Shop machinery, tools and appurtenances,	250	250	.....	.....	250	250
22. Locomotives,	21,000	1,080	.....	.....	21,000	1,080
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	35	25	.....	.....	35	25
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$88,750	$55,772	$11,596	$5,648	$100,346	$61,420
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						102,600
29. Total value of all items as above,						$164,020
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$25				

SUMMARY SHEET.

Name of Railroad— NEW JERSEY JUNCTION.

Name of Railroad System— WEST SHORE.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$654,174	$654,174	$156,060	$156,060	$810,234	$810,234
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	104,820	104,820	.....	.....	104,820	104,820
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	133,524	113,993	.....	.....	133,524	113,993
6. Track and its appurtenances,	143,116	100,882	6,081	4,146	149,197	105,028
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	2,049	1,402	.....	.....	2,049	1,402
9. Block signaling,	6,224	6,001	.....	.....	6,224	6,001
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	198	170	.....	.....	198	170
12. Passenger and freight stations,	.....	.....	26,782	19,785	26,782	19,785
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	4,032	3,024	.....	.....	4,032	3,024
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	348	236	348	236
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,940	1,461	1,605	1,204	3,545	2,665
21. Shop machinery, tools and appurtenances,	225	225	.....	.....	225	225
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$1,050,302	$986,152	$190,876	$181,431	$1,241,178	$1,167,583
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						236,500
29. Total value of all items as above,						$1,404,083

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— NEW JERSEY AND PENNSYLVANIA.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$5,675	$5,675	$412	$412	$6,087	$6,087
2. Clearing and grubbing,	660	660	.....	.....	660	660
3. Graduation,	22,600	22,600	.....	.....	22,600	22,600
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	22,254	13,944	.....	.....	22,254	13,944
6. Track and its appurtenances,	133,962	90,561	1,807	1,251	135,769	91,812
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	345	218	.....	.....	345	218
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	6,409	3,110	6,409	3,110
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	1,865	1,119	.....	.....	1,865	1,119
16. Turn-tables, transfer tables, track scales and track cranes,	1,284	618	1,070	535	2,354	1,153
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	3,658	1,522	5,117	1,895	8,775	3,417
21. Shop machinery, tools and appurtenances,	117	117	.....	.....	117	117
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	1,500	900	.....	.....	1,500	900
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	220	75	.....	.....	220	75
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$194,140	$138,009	$14,815	$7,203	$213,970	$145,212
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						13,700
29. Total value of all items as above,						$158,912
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$300				

SUMMARY SHEET.

Name of Railroad— NEW YORK AND FORT LEE.

Name of Railroad System— WEST SHORE.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$266,901	$266,901	.....	.....	$266,901	$266,901
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	57,885	39,284	.....	.....	57,885	39,284
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,						
27. Total value of tangible property,	$324,786	$306,185	.....	.....	$324,786	$306,185
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						51,800
29. Total value of all items as above,						$357,985

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— NEW YORK, ONTARIO AND WESTERN RAILWAY.

Name of Railroad System— UNCLASSIFIED.

Description.	MAIN STEM 1. Value New.	MAIN STEM 2. Present Value.	SECOND CLASS 3. Value New.	SECOND CLASS 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	.....	.....	.....	.....	.....	.....
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	.....	.....	.....	.....	.....	.....
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines.	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	$67,725	$55,983	.....	.....	$67,725	$55,983
23. Passenger train equipment,	32,036	20,021	.....	.....	32,036	20,021
24. Freight train equipment,	349,780	237,851	.....	.....	349,780	237,851
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$449,541	$313,855	.....	.....	$449,541	$313,855

SUMMARY SHEET.

Name of Railroad— NORTH JERSEY RAPID TRANSIT COMPANY.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$31,501	$31,501	$1,227	$1,227	$32,728	$32,728
2. Clearing and grubbing,	265	265	.....	.....	265	265
3. Graduation,	38,712	38,712	.....	.....	38,712	38,712
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	53,926	51,228	.....	.....	53,926	51,228
6. Track and its appurtenances,	79,320	56,108	713	512	80,033	56,620
7. Fencing,	1,798	1,348	1,519	1,140	3,317	2,488
8. Crossings, cattle guards, gates and signs,	912	821	.....	.....	912	821
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	192	190	192	190
13. Shop buildings and engine houses,	.....	.....	33,811	31,000	33,811	31,000
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	508	457	.....	.....	508	457
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	38,299	28,743	.....	.....	38,299	28,743
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	25,400	24,130	.....	.....	25,400	24,130
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$270,641	$233,313	$37,462	$34,069	$308,103	$267,382
28. Value of sub-division IV. The value of remaining property, including the franchise,						1,000
29. Total value of all items as above,						$268,382

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— PEMBERTON AND HIGHTSTOWN.

Name of Railroad System— UNION TRANSPORTATION COMPANY, LESSEE.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$12,986	$12,986	$938	$938	$13,924	$13,924
2. Clearing and grubbing,	390	390	.....	.....	390	390
3. Graduation,	55,170	55,170	378	378	55,548	55,548
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	35,964	28,416	.....	.....	35,964	28,416
6. Track and its appurtenances,	168,585	119,013	2,381	1,633	170,966	120,646
7. Fencing,	4,266	3,215	46	40	4,312	3,255
8. Crossings, cattle guards, gates and signs,	1,135	675	.....	.....	1,135	675
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	19,708	12,020	19,708	12,020
13. Shop buildings and engine houses,	.....	.....	1,980	990	1,980	990
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	14,601	10,951	.....	.....	14,601	10,951
16 Turn-tables, transfer tables, track scales and track cranes,	.....	.....	2,247	900	2,247	900
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	3,318	2,483	3,934	2,790	7,252	5,273
21. Shop machinery, tools and appurtenances,	580	580	.....	.....	580	580
22. Locomotives,	30,555	19,958	.....	.....	30,555	19,958
23. Passenger train equipment,	27,500	16,500	.....	.....	27,500	16,500
24. Freight train equipment,	2,400	1,200	.....	.....	2,400	1,200
25. Miscellaneous road equipment,	1,030	670	.....	.....	1,030	670
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$358,480	$272,207	$31,612	$19,689	$390,092	$291,896
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$292,896
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$1,450				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—PHILADELPHIA AND BRIGANTINE. Name of Railroad System—UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,028	$1,028	.....	.....	$1,028	$1,028
2. Clearing and grubbing,	3,320	3,320	.....	.....	3,320	3,320
3. Graduation,	24,820	24,820	.....	.....	24,820	24,820
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	.....	.....	.....	.....	.....	.....
6. Track and its appurtenances,	57,171	13,699	6,461	1,544	63,632	15,243
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	675	330	675	330
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	198	10	198	10
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$86,339	$42,867	$7,334	$1,884	$93,673	$44,751
Value recommended for taxation,						$16,000
28. Value of sub-division IV. "The value of remaining property, including the franchise,						1,000
29. Total value of all items as above,						$17,000

This road has not been operated for some years.

SUMMARY SHEET.

Name of Railroad— POHATCONG.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$2,420	$2,420	.....	.....	$2,420	$2,420
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	4,490	4,490	.....	.....	4,490	4,490
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	144	111	.....	.....	144	111
6. Track and its appurtenances,	10,084	6,933	1,739	1,192	11,823	8,125
7. Fencing,	800	640	.....	.....	800	640
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	571	400	.....	.....	571	400
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$18,509	$14,994	$1,739	$1,192	$20,248	$16,186
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$17,186

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—
RAHWAY VALLEY COMPANY, LESSEE.

Name of Railroad System—
UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$529	$529	.....	.....	$529	$529
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	375	375	.....	.....	375	375
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	148	141	.....	.....	148	141
6. Track and its appurtenances,	1,055	746	.....	.....	1,055	746
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$2,107	$1,791	.....	.....	$2,107	$1,791
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$2,791

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— RAHWAY VALLEY.

Name of Railroad System— RAHWAY VALLEY COMPANY, LESSEE.

Description.	MAIN STEM— 1. Value New.	MAIN STEM— 2. Present Value.	SECOND CLASS— 3. Value New.	SECOND CLASS— 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$29,474	$29,474	$7,606	$7,606	$37,080	$37,080
2. Clearing and grubbing,	1,780	1,780	.....	.....	1,780	1,780
3. Graduation,	42,790	42,790	1,526	1,526	44,316	44,316
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	36,992	29,263	6,087	5,174	43,079	34,437
6. Track and its appurtenances,	69,434	49,011	7,486	5,072	76,920	54,083
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	282	156	.....	.....	282	156
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	11,102	9,175	11,102	9,175
13. Shop buildings and engine houses,	168	109	539	330	707	439
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	1,282	962	.....	.....	1,282	962
16. Turn-tables, transfer tables, track scales and track cranes,	1,659	1,244	.....	.....	1,659	1,244
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,191	1,579	232	140	2,423	1,719
21. Shop machinery, tools and appurtenances,	340	340	.....	.....	340	340
22. Locomotives,	15,900	9,858	.....	.....	15,900	9,858
23. Passenger train equipment,	13,500	2,000	.....	.....	13,500	2,000
24. Freight train equipment,	150	100	.....	.....	150	100
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$215,942	$168,666	$34,578	$29,023	$250,520	$197,689
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$198,689

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad—RARITAN RIVER. Name of Railroad System—UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$51,204	$51,204	$15,453	$15,453	$66,657	$66,657
2. Clearing and grubbing,	6,772	6,772	.....	.....	6,772	6,772
3. Graduation,	127,640	127,640	6,684	6,684	134,324	134,324
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	82,697	72,002	372	279	83,069	72,281
6. Track and its appurtenances,	215,860	150,491	36,303	24,752	252,163	175,243
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	1,406	1,001	.....	.....	1,406	1,001
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	494	454	.....	.....	494	454
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	16,162	12,665	16,162	12,665
13. Shop buildings and engine houses,	428	284	1,573	785	2,001	1,069
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	3,492	2,619	.....	.....	3,492	2,619
16. Turn-tables transfer tables, track scales and track cranes,	3,157	2,125	3,905	1,845	7,062	3,970
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	3,358	2,589	251	130	3,609	2,719
21. Shop machinery, tools and appurtenances,	1,667	1,285	.....	.....	1,667	1,285
22. Locomotives,	65,500	50,623	.....	.....	65,500	50,623
23. Passenger train equipment,	33,700	11,693	.....	.....	33,700	11,693
24. Freight train equipment,	112,840	29,735	.....	.....	112,840	29,735
25. Miscellaneous road equipment,	1,700	1,367	.....	.....	1,700	1,367
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$711,915	$511,884	$80,703	$62,593	$792,618	$574,477
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						71,000
29. Total value of all items as above,						$645,477
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property		$1,000				

SUMMARY SHEET.

Name of Railroad—
RARITAN TERMINAL AND TRANSPORTATION.

Name of Railroad System—
UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$7,536	$7,536	.....	.....	$7,536	$7,536
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	1,490	1,490	.....	.....	1,490	1,490
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	672	504	.....	.....	672	504
6. Track and its appurtenances,	5,686	3,805	.....	.....	5,686	3,805
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	171	85	.....	.....	171	85
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$15,555	$13,420	.....	.....	$15,555	$13,420
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						11,300
29. Total value of all items as above,						$24,720

SUMMARY SHEET.

Name of Railroad— SOUTH EASTON AND PHILLIPSBURG.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem — 1. Value New.	Main Stem — 2. Present Value.	Second Class — 3. Value New.	Second Class — 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$2,190	$2,190	$2,413	$2,413	$4,603	$4,603
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	30,710	30,710	5,778	5,778	36,488	36,488
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	54,427	48,980	.....	.....	54,427	48,980
6. Track and its appurtenances,	26,486	17,679	6,900	4,587	33,386	22,266
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	6,494	5,126	6,494	5,126
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	6,153	5,845	6,153	5,845
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	13,039	10,323	13,039	10,323
21. Shop machinery, tools and appurtenances,	200	200	.....	.....	200	200
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$114,013	$99,759	$40,777	$34,072	$154,790	$133,831
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						109,300
29. Total value of all items as above,						$243,131

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.
SUMMARY SHEET.

Name of Railroad— STATEN ISLAND RAPID TRANSIT RAILWAY.

Name of Railroad System— UNCLASSIFIED.

Description.	MAIN STEM— 1. *Value New.*	2. *Present Value.*	SECOND CLASS— 3. *Value New.*	4. *Present Value.*	5. Value New Total.	6. Present Value Total.
1. Land,	.....	.....	.....	.....	.....	.....
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	.....	.....	.....	.....	.....	.....
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	142,274	99,592	.....	.....	142,274	99,592
6. Track and its appurtenances,	1,450	872	.....	.....	1,450	872
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	21,032	18,439	.....	.....	21,032	18,439
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	.....	.....	.....	.....	.....	.....
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$164,756	$118,903	.....	.....	$164,756	$118,903

Name of Railroad—
TRENTON, LAWRENCEVILLE AND PRINCETON.

Name of Railroad System—
UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$8,824	$8,824	$325	$325	$9,149	$9,149
2. Clearing and grubbing,	600	600	.....	.....	600	600
3. Graduation,	17,190	17,190	.....	.....	17,190	17,190
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	14,157	10,962	.....	.....	14,157	10,692
6. Track and its appurtenances,	83,149	59,486	723	523	83,872	60,009
7. Fencing,	4,974	2,985	.....	.....	4,974	2,985
8. Crossings, cattle guards, gates and signs,	962	550	.....	.....	962	550
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	1,026	885	1,026	885
13. Shop buildings and engine houses,	16,362	11,400	1,152	385	17,514	11,785
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	1,879	1,409	.....	.....	1,879	1,409
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	69,478	48,600	94	65	69,572	48,665
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	33,200	25,068	.....	.....	33,200	25,068
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	700	420	.....	.....	700	420
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$251,475	$187,494	$3,320	$2,183	$254,795	$189,677
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$190,677
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$1,500				

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911. SUMMARY SHEET.

Name of Railroad— TRENTON, LAWRENCEVILLE AND PRINCETON EXT.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$3,988	$3,988	.....	.....	$3,988	$3,988
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	4,610	4,610	.....	.....	4,610	4,610
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	7,524	6,260	.....	.....	7,524	6,260
6. Track and its appurtenances,	13,609	9,770	.....	.....	13,609	9,770
7. Fencing,	749	562	.....	.....	749	562
8. Crossings, cattle guards, gates and signs,	171	95	.....	.....	171	95
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	120	110	120	110
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	274	206	.....	.....	274	206
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	6,658	4,660	.....	.....	6,658	4,660
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. *Locomotives,	.....	.....	.....	.....	.....	.....
23. *Passenger train equipment,	.....	.....	.....	.....	.....	.....
25. *Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
24. *Freight train equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$37,583	$30,151	$120	$110	$37,703	$30,261
28. Value of sub-division IV. The value of remaining property, including the franchise,						1,000
29. Total value of all items as above						$31,261

* For equipment, see Trenton, Lawrenceville and Princeton R. R.

RAILROAD AND CANAL REVALUATION. NEW JERSEY, 1911.

SUMMARY SHEET.

Name of Railroad— TRENTON TERMINAL.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$1,081	$1,081	$132	$132	$1,213	$1,213
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	730	730	.....	.....	730	730
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	94	75	.....	.....	94	75
6. Track and its appurtenances,	3,515	2,541	.....	.....	3,515	2,541
7. Fencing,	149	75	29	15	178	90
8. Crossings, cattle guards, gates and signs,	20	10	.....	.....	20	10
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	.....	.....	.....	.....
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,721	1,377	.....	.....	1,721	1,377
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	.....	.....	.....	.....	.....	.....
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$7,310	$5,889	$161	$147	$7,471	$6,036
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$7,036

SUMMARY SHEET.

Name of Railroad—TUCKERTON. **Name of Railroad System—UNCLASSIFIED.**

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$6,282	$6,282	$605	$605	$6,887	$6,887
2. Clearing and grubbing,	9,159	9,159	.....	.....	9,159	9,159
3. Graduation,	55,082	55,082	.....	.....	55,082	55,082
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	7,387	6,029	.....	.....	7,387	6,029
6. Track and its appurtenances,	203,732	144,661	459	315	204,191	144,976
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	7,776	5,768	7,776	5,768
13. Shop buildings and engine houses,	.....	.....	2,507	1,819	2,507	1,819
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	4,996	3,747	.....	.....	4,996	3,747
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	1,070	642	1,070	642
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	1,694	1,128	1,245	1,053	2,939	2,181
21. Shop machinery, tools and appurtenances,	100	100	.....	.....	100	100
22. Locomotives,	21,000	4,403	.....	.....	21,000	4,403
23. Passenger train equipment,	10,700	2,700	.....	.....	10,700	2,700
24. Freight train equipment,	3,000	500	.....	.....	3,000	500
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$323,132	$233,791	$13,662	$10,202	$336,794	$243,993
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$244,993
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$220				

SUMMARY SHEET.

Name of Railroad— VENICE PARK RAILROAD.

Name of Railroad System— UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$3,188	$3,188	.....	.....	3,188	3,188
2. Clearing and grubbing,	.....	.....	.....	.....	.....	.....
3. Graduation,	7,490	7,490	.....	.....	7,490	7,490
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	1,778	1,600	.....	.....	1,778	1,600
6. Track and its appurtenances,	3,379	2,324	.....	.....	3,379	2,324
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	.....	.....	.....	.....	.....	.....
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	444	400	444	400
13. Shop buildings and engine houses,	.....	.....	.....	.....	.....	.....
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	.....	.....	.....	.....	.....	.....
16. Turn-tables, transfer tables, track scales and track cranes,	.....	.....	.....	.....	.....	.....
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	2,375	2,064	.....	.....	2,375	2,064
21. Shop machinery, tools and appurtenances,	.....	.....	.....	.....	.....	.....
22. Locomotives,	.....	.....	.....	.....	.....	.....
23. Passenger train equipment,	2,000	1,000	.....	.....	2,000	1,000
24. Freight train equipment,	.....	.....	.....	.....	.....	.....
25. Miscellaneous road equipment,	.....	.....	.....	.....	.....	.....
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$20,210	$17,666	$444	$400	$20,654	$18,066
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above						$19,066

Name of Railroad— **WEST SHORE.**

Name of Railroad System— **UNCLASSIFIED.**

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$342,747	$342,747	$4,058,960	$4,058,960	$4,401,707	$4,401,707
2. Clearing and grubbing,	1,488	1,488	.....	.....	1,488	1,488
3. Graduation,	350,830	350,830	65,239	65,239	416,069	416,069
4. Tunnels,	619,800	557,800	.....	.....	619,800	557,800
5. Bridges, retaining walls and culverts,	190,616	154,852	23,298	18,688	213,914	173,540
6. Track and its appurtenances,	538,638	415,549	487,552	332,933	1,026,190	748,482
7. Fencing,	4,955	3,368	2,347	1,698	7,302	5,066
8. Crossings, cattle guards, gates and signs,	10,132	7,076	286	250	10,418	7,326
9. Block signaling,	38,802	33,436	.....	.....	38,802	33,436
10. Interlocking,	30,704	25,717	.....	.....	30,704	25,717
11. Miscellaneous signals,	1,054	907	.....	.....	1,054	907
12. Passenger and freight stations,	.....	.....	436,706	275,290	436,706	275,290
13. Shop buildings and engine houses,	.....	.....	454,386	377,945	454,386	377,945
14. Docks and piers,	.....	.....	1,709,020	1,219,230	1,709,020	1,219,230
15. Telegraph and telephone lines,						
16. Turn-tables, transfer tables, track scales	33,152	24,864	.....	.....	33,152	24,864
and track cranes,	.....	.....	27,268	21,610	27,268	21,610
17. Pintsch gas plants,	.....	.....	51,026	38,020	51,026	38,020
18. Electric light plants,	.....	.....	360,660	263,990	360,660	263,990
19. Grain elevators,	.....	.....	1,500,057	1,087,000	1,500,057	1,087,000
20. Miscellaneous structures,	10,286	7,343	173,345	115,305	183,631	122,648
21. Shop machinery, tools and appurtenances,	101,460	66,168	.....	.....	101,460	66,168
22. Locomotives,	629,227	411,064	.....	.....	629,227	411,064
23. Passenger train equipment,	231,981	134,827	.....	.....	231,981	134,827
24. Freight train equipment,	280,000	180,000	.....	.....	280,000	180,000
25. Miscellaneous road equipment,	19,202	11,177	.....	.....	19,202	11,177
26. Floating or marine equipment,	1,075,000	737,133	.....	.....	1,075,000	737,133
27. Total value of tangible property,	$4,510,074	$3,466,346	$9,350,150	$7,876,158	$13,860,224	$11,342,504
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						972,900
29. Total value of all items as above,						$12,315,404
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$1,274				

SUMMARY SHEET.

Name of Railroad—WHARTON AND NORTHERN. Name of Railroad System—UNCLASSIFIED.

Description.	Main Stem 1. Value New.	Main Stem 2. Present Value.	Second Class 3. Value New.	Second Class 4. Present Value.	5. Value New Total.	6. Present Value Total.
1. Land,	$3,651	$3,651	.....	.....	$3,651	$3,651
2. Clearing and grubbing,	10,006	10,006	.....	.....	10,006	10,006
3. Graduation,	118,400	118,440	.....	.....	118,440	118,440
4. Tunnels,	.....	.....	.....	.....	.....	.....
5. Bridges, retaining walls and culverts,	88,287	72,881	.....	.....	88,287	72,881
6. Track and its appurtenances,	138,122	94,904	3,065	2,078	141,187	96,982
7. Fencing,	.....	.....	.....	.....	.....	.....
8. Crossings, cattle guards, gates and signs,	422	270	.....	.....	422	270
9. Block signaling,	.....	.....	.....	.....	.....	.....
10. Interlocking,	.....	.....	.....	.....	.....	.....
11. Miscellaneous signals,	.....	.....	.....	.....	.....	.....
12. Passenger and freight stations,	.....	.....	10,080	7,090	10,080	7,090
13. Shop buildings and engine houses,	199	125	1,273	510	1,472	635
14. Docks and piers,	.....	.....	.....	.....	.....	.....
15. Telegraph and telephone lines,	2,504	1,878	.....	.....	2,504	1,878
16. Turn-tables, transfer tables, track scales and track cranes,	1,740	1,218	.....	.....	1,740	1,218
17. Pintsch gas plants,	.....	.....	.....	.....	.....	.....
18. Electric light plants,	.....	.....	.....	.....	.....	.....
19. Grain elevators,	.....	.....	.....	.....	.....	.....
20. Miscellaneous structures,	3,245	2,084	1,772	1,360	5,017	3,444
21. Shop machinery, tools and appurtenances,	75	75	.....	.....	75	75
22. Locomotives,	25,975	13,603	.....	.....	25,975	13,603
23. Passenger train equipment,	20,400	16,434	.....	.....	20,400	16,434
24. Freight train equipment,	27,500	19,900	.....	.....	27,500	19,900
25. Miscellaneous road equipment,	575	365	.....	.....	575	365
26. Floating or marine equipment,	.....	.....	.....	.....	.....	.....
27. Total value of tangible property,	$441,141	$355,834	$16,190	$11,038	$457,331	$366,872
28. Value of sub-division IV. "The value of remaining property, including the franchise,"						1,000
29. Total value of all items as above,						$367,872
30. Value of materials and supplies in N. J. for use in maintenance of R. R. property,		$300				

GRAND SUMMARY.

VALUATION OF 1911 COMPARED WITH ASSESSMENT OF 1910.

Name of System.	*Main Stem.*	*Subdivision IV.*	*Tangible Personal.*	*Second Class.*	*Total.*
1. Pennsylvania Railroad,	$44,388,784	$20,899,800	$27,437,067	$27,057,561	$119,783,212
Assessment 1910,	41,976,490	18,652,200	8,520,671	21,689,651	90,839,012
Difference,	$2,412,294	$2,247,600	$18,916,396	$5,367,910	$28,944,200
2. Central R. R. of N. J.,	$19,616,759	$22,278,200	$16,877,385	$13,409,114	$72,181,458
Assessment 1910,	27,083,000	7,875,800	9,682,904	12,046,972	56,688,676
Difference,	D. $7,466,241	$14,402,400	$7,194,481	$1,362,142	$15,492,782
3. Philadelphia & Reading Railway,	$6,373,761	$4,836,800	$2,926,804	$1,589,500	$15,726,865
Assessment 1910,	6,837,500	2,183,500	1,124,950	1,268,354	11,414,304
Difference,	D. 463,739	$2,653,300	$1,801,854	$321,146	$4,312,561
4. Erie Railroad,	$12,574,189	$3,510,500	$4,497,039	$10,634,900	$31,216,628
Assessment 1910,	9,772,000	2,066,200	2,417,410	9,448,718	23,704,328
Difference,	$2,802,189	$1,444,300	$2,079,629	$1,186,182	$7,512,300
5. D., L. & W. R. R.,	$19,751,033	$11,318,100	$12,407,418	$16,008,832	$59,485,383
Assessment 1910,	16,321,800	14,010,000	5,096,301	13,920,464	49,348,565
Difference,	$3,429,233	D. $2,691,900	$7,311,117	$2,088,368	$10,136,818
6. N. Y., S. & W. R. R.,	$5,004,437	$367,000	$781,990	$1,113,223	$7,266,650
Assessment 1910,	4,763,100	828,500	943,000	1,098,421	7,633,021
Difference,	$241,337	D. $461,500	D. $161,010	$14,802	D. $366,371
7. Lehigh Valley Railroad,	$14,004,417	$7,105,700	$6,759,863	$9,671,413	$37,541,393
Assessment 1910,	13,386,600	3,730,000	1,179,034	6,170,960	24,466,594
Difference,	$617,817	$3,375,700	$5,580,829	$3,500,453	$13,074,799

Name of System.	Main Stem.	Subdivision IV.	Tangible. Personal.	Second Class.	Total.
8. Railroads Not Classified,	$11,442,233	$5,525,500	$4,407,482	$10,183,621	$31,558,836
Assessment 1910,	10,008,720	2,259,200	2,243,115	7,940,918	22,451,953
Difference,	$1,433,513	$3,266,300	$2,164,367	$2,242,703	$9,106,883
9. Total Main Stem,	$133,155,613				
Assessment 1910,	130,149,210				
Difference,	$3,006,403				
10. Total Subdivision IV.,		$75,841,600			
" Assessment 1910,		51,605,400			
" Difference,		$24,326,200			
11. Total Tangible Personal,			$76,095,048		
" Assessment 1910,			31,207,385		
" Difference,			$44,887,663		
12. Total Second Class,				$89,668,164	
" Assessment 1910,				73,584,458	
" Difference,				$16,083,706	
13. Grand Total Valuation,					$374,760,425
" " Assessment 1910,					286,546,453
" " Difference,					$88,213,972

Valuation New for all railroads exclusive of the Hudson and Manhattan, Pennsylvania Tunnel and Terminal Company, and The Lackawanna Railroad of New Jersey, and exclusive of Subdivision IV. is,.... $361,157,229

Present valuation as above, ... 285,016,934

Total depreciation, ... 76,140,295

" " is twenty-one per cent. (21%) plus

No depreciation has been made on valuation new on the items of Land, Graduation and Clearing and Grubbing. The total of which items is, ... 105,140,469

The depreciation on all elements other than Land, Graduation and Clearing and Grubbing averages twenty-nine and seven-tenths per cent. (29.7%).

The Hudson and Manhattan, Pennsylvania Tunnel and Terminal Company, and the Lackawanna Railroad of New Jersey are omitted from the comparison for the reason that these roads represent special conditions.

Statement of Capital Stock and Funded Debt of Subsidiary Corporations.

STATEMENT OF CAPITAL STOCK AND FUNDED DEBT OF SUBSIDIARY RAILROAD CORPORATIONS FORMING THE PENNSYLVANIA RAILROAD SYSTEM OF NEW JERSEY.

Dec. 31, 1910.

Name of Corporation.	*Par Value Cap. Stock.*	*Par Value Fund. Debt.*	*1.	*2.	*3.	*4.	*5.
1. Barnegat R. R. Co.,	$50,000	.....	100.0	....	....	....	100.0
2. Belvidere Del. R. R.,	1,253,000	2,692,000	19.5	71.3	11.1	44.5	66.8
3. Camden & Burlington R. R.,	381,925	350,000	....	49.8	....	....	26.0
4. Del. R. R. R. & Bridge Co.,	1,300,000	1,300,000	100.0	....	....	....	50.0
5. Freehold & Jamesburg R. R.,	295,600	382,050	12.8	54.0	25.3	22.4	56.1
6. Kinkora & New Lisbon R. R.,	40,000	.....	100.0	....	....	....	100.0
7. Millstone & New Brunswick,	95,750	.....	0.2	50.1	....	....	50.4
8. Mount Holly, L. & M. R. R.,	95,650	75,000	....	....	....	....	....
9. New York Bay R. R.,	6,000,000	3,885,000	100.0	....	92.9	....	97.2
10. Perth Amboy & W. R. R.	228,400	.....	86.8	13.2	....	....	100.0
11. Phila. & Beach Haven R. R.,	200,000	.....	100.0	....	....	....	100.0
12. Phila. & Long Branch R. R.,	765,000	750,000	100.0	....	100.0	....	100.0
13. Rocky Hill R. R. & T. Co.,	45,600	.....	0.5	59.0	....	....	59.5
14. United N. J. R. R. & C. Co.,	21,240,400	20,000,000	6.3	....	....	....	3.3
15. Vincentown Br R. R.,	25,000	15,000	12.6	40.0	....	....	32.9
16. West Jersey & S. R. R.,	9,681,650	8,215,150	51.3	....	16.9	....	35.5
17. Penna. Tunnel & Ter. Co.,	25,000,000	.....	60.0	....	....	....	60.0
	$66,697,975	37,664,200					
Stocks and bonds owned by the Pa. and U. N. J. Systems,	31,517,000	7,436,600		47.2		19.7	37.3

*1. Percentage of capital stock owned by Penna. R. R. System.
*2. " " " " " " United N. J. "
*3. " " funded debt " " Penna. R. R. "
*4. " " " " " " United N. J. "
*5. " " capital stock and funded debt owned by the two systems.

STATEMENT OF CAPITAL STOCK AND FUNDED DEBT OF SUBSIDIARY RAILROAD CORPORATIONS FORMING THE CENTRAY RAILROAD OF NEW JERSEY SYSTEM, IN NEW JERSEY.

June 30, 1910.

Name of Corporation.	*Par Value Cap. Stock.*	*Par Value Fund. Debt.*	**1.*	**2.*	**3.*
1. Buena Vista R. R. Co.,	$21,400	.....	100	.....	100
2. Carteret Ext'n R. R. Co.,	23,600	.....	100	.....	100
3. Carteret & Sewaren R. R. Co.,	24,800	.....	100	.....	100
4. Central R. R. of New Jersey,	27,436,800	$45,474,000	.....	2.12	1.05
5. Cumberland & Maurice R.,	252,900	.....	99.9	.....	99.9
6. " " " Ex.,	16,200	.....	100	.....	100
7. Dover & Rockaway R. R. Co.,	140,000	35,000	32	100	57
8. Elizabeth Ex. " "	30,000	.....	100	.....	100
9. Freehold & Atlantic H.,	650,000	.....	100	.....	100
10. Hibernia Mine R. R., Leased,	200,000	.....	.....	.....	.....
11. Lafayette R. R. Co.,	61,800	.....	100	.....	100
12. Manufacturers Ex. R. R. Co., Branch to Baeder Adamson & Co. Works,	53,700	.....	100	.....	100
13. Middle Brook R. R. Co.,	4,000	.....	100	.....	100
14. Middle Valley " "	9,900	.....	100	.....	100
15. Navesink " "	701,900	.....	100	.....	100
16. New Jersey Southern R. R. Co.,	2,590,600	.....	100	.....	100
17. " " Terminal " "	500,000	250,000	100	100	100
18. N. Y. & Long Branch " "	2,000,000	2,500,000	100	9.6	40.9
19. Ogden Mine " "	450,000	.....	4.4	.....	4.4
20. Raritan North Shore " "	66,400	.....	100	.....	100
21. Sound Shore " "	149,200	.....	100	.....	100
22. Toms River " "	240,000	.....	100	.....	100
23. Toms River & Barnegat " "	75,300	.....	100	.....	100
24. Vineland " "	600,000	.....	100	.....	100
25. " Branch " "	8,000	.....	100	.....	100
26. West End " "	43,700	.....	100	.....	100
27. West Side Connecting " "	125,400	.....	100	.....	100
	$36,475,600	$48,259,000	22.8	3.2	11.2

*1. Percentage of capital stock owned by the Central Railroad System.
*2. Percentage of funded debt owned by the Central Railroad System.
*3. Percentage of capital stock and funded debt owned by Central Railroad System.

STATEMENT OF CAPITAL STOCK AND FUNDED DEBT OF SUBSIDIARY RAILROAD CORPORATIONS FORMING THE PHILADELPHIA AND READING RAILWAY SYSTEM.

June 30, 1910.

Name of Corporation.	*Cap. Stock.* *Cap. Stock.*	*Fund. Debt.* *Funded Dbt.*	*1.	*2.	*3.
1. Atlantic City R. R. Co., ... Pref.	$1,000,000	.....	100	.....	.....
Com.	2,625,000	$4,500,000	99.6	1.4	45
2. Cape May, Del Bay & Sewells P. R R. Co.,..	150,000	150,000	92	100	96
3. Del & Bound Brook R. R. Co.,.....	1,800,000	1,800,000	.....	.....	.....
4. East Trenton R R. Co., ...	59,000	.....	.....	.....	.....
5. Port Reading R. R. Co., ...	2,000,000	1,500,000	100	.....	57
	$7,634,000	$7,950,000	75	2.7	38

*1. Percentage of capital stock owned by Reading Company.
*2. " " funded debt " " " "
*3. " " capital stock and funded debt owned by Reading Company.

STATEMENT OF CAPITAL STOCK AND FUNDED DEBT OF SUBSIDIARY RAILROAD CORPORATIONS FORMING THE ERIE RAILROAD SYSTEM IN NEW JERSEY.

June 30, 1910.

Name of Corporation.	*Par Value Cap. Stock.*	*Par Value Fund. Debt.*	*1.	*2.	*3.
1. Arlington Railroad Co., ...	$4,000	.....	100.00	.....	100.00
2. Bergen County Railroad Co., ...	200,000	$200,000	100.00	.....	50.00
3. Bergen & Dundee " "	40,000	.....	100.00	.....	100.00
4. Caldwell Railway Co., ...	38,900	.....	1.30	.....	1.30
5. Docks Connecting Ry. Co., ...	9,000	.....	100.00	.....	100.00
6. Erie Trminals R. R. "	68,000	.....	88.20	.....	88.20
7. Long Dock Company, ...	800,000	7,500,000	100.00	.....	9.60
8. Newark & Hudson R. R. Co., ...	250,000	250,000	100.00	100.00	100.00
9. New Jersey & New York R. R. Co., ...	228,600	1,032,500	82.50	.....	56.00
10. New York & Greenwood L. " "	100,000	1,471,600	89.40	6.20	11.40
11. New York Lake Erie & W. D. I. "	604,000	3,396,000	100.00	15.10	26.20
12. Northern R. R. Co. of New Jersey, ...	1,000,000	808,000	.08	.08	.07
13. Paterson & Hudson R. R .R. Co., ...	630,000	.....	.....	.....	.....
14. Paterson, Newark & New York R. R., ...	250,000	500,000	100.00	99.75	99.86
15. Paterson and Ramapo R R. Co., ...	298,000	.....	.....	.....	.....
16. Pen Horn Creek Railroad "	6,000	.....	.....	.....	.....
17. Roseland Railway "	2,000	.....	.....	.....	.....
18. Watchung Railroad "	55,000	41,500	.....	.....	.....
	$6,583,500	$15,199,600	62.	9.0	24.5

*1: Percentage of capital stock owned by Erie Railroad System.
*2. " " funded debt " " " " "
*3. " " capital stock and funded debt owned by Erie Railroad System.

STATEMENT OF CAPITAL STOCK AND FUNDED DEBT OF SUBSIDIARY RAILROAD CORPORATIONS FORMING THE DELAWARE, LACKAWANNA AND WESTERN RAILROAD SYSTEM IN NEW JERSEY.

Jan. 1, 1911.

Name of Corporation.	*Par Value Cap. Stock.*	*Par Value Fund. Debt.*	*1.	*2.	*3.
1. Chester R. R. Co.,	$100,534	$100,000	64.7	100.0	82.3
2. Hopatcong R. R Co.,	10,000	.....	100.0	.....	100.0
3. D., L. & W. R. R. Co., Lessee of Morris & Essex R. R. Co.,	15,000,000	33,477,000	.....	19.1	13.2
4 Morris & Essex Ext'n R. R. Co.,	221,000	.....	19.1	.....	19.1
5. Newark & Bloomfield R. R. Co.,	103,850	.....	94.0	.....	94.0
6. Passaic & Delaware " "	111,050	.....	98.5	.....	98.5
7. Passaic & Delaware Ext'n R. R. Co.,	100,000	.....	.....	.....	.....
8. Rockaway River and Montville R. R. Co.,	30,000	.....	.....	.....	.....
9. Sussex R. R. Co., & Branchville Branch,	1,638,600	.....	4.67	.....	4.67
10. Warren R. R. Co.,	1,800,000	1,394,000	0.55	.....	.3
	$19,115,034	$34,971,000	2.1	18.6	12.8

*1. Percentage of capital stock owned by the D. L. & W. R. R. System.
*2. Percentage of funded debt owned by the D. L. & W. R. R. System.
*3. Percentage of capital stock and funded debt owned by the D. L. & W. R. R. System.

STATEMENT OF CAPITAL STOCK AND FUNDED DEBT OF

SUBSIDIARY RAILROAD CORPORATIONS FORMING THE

NEW YORK SUSQUEHANNA AND WESTERN RAILROAD COMPANY, IN NEW JERSEY.

June 30, 1910.

Name of Corporation.	*Par Value Cap. Stock.*	*Par Value Fund. Debt.*	*1.	*2.	*3.
1. Hackensack & Lodi R. R. Co., ...	$25,000	.....	100	.....	100
2. Lodi Branch " "	60,000	.....	100	.....	100
3. Macopin " "	60,000	44,000	100	.....	57
4. New York, Sus. & W. " "	26,000,000	12,324,000	.....	.01	.....
5. Passaic & New York " "	70,000	70,000	100	.....	50
	$26,215,000	$12,438,000	.82	.....	.57

*1. Percentage of capital stock owned by the New York, Susquehanna & W. R. R. Co.
*2. Percentage of funded debt owned by the New York, Susquehanna & W. R. R. Co.
*3. Percentage of capital and funded debt owned by the New York, Susquehanna & W. R. R. Co.

STATEMENT OF CAPITAL STOCK AND FUNDED DEBT OF SUBSIDIARY RAILROAD CORPORATIONS FORMING THE LEHIGH VALLEY SYSTEM IN NEW JERSEY.

June 30, 1910.

Name of Corporation.	*Par Value Cap. Stock.*	*Par Value Fund. Debt.*	*1.	*2.	*3.
1. Bay Shore Connecting R. R. Co., ...	$34,777	.....	50	.....	50
2. Lehigh Valley R. R. of N. J., ...	20,433,000	$17,675,500	100	6.79	56.76
	$20,467,777	$17,675,500	99.91	6.79	56.71

*1. Percentage of capital stock owned by Lehigh Valley Railroad.
*2. Percentage of funded debt owned by Lehigh Valley Railroad.
*3. Percentage of capital stock and funded debt owned by L. V. R.

RATIO OF OPERATING EXPENSES TO EARNINGS.

RATIO OF OPERATING EXPENSES TO OPERATING REVENUES OF THE FOLLOWING RAILROADS.

Atlantic City Railroad Company,	80.49	per cent.
Atlantic City and Shore,	51.56	"
Baltimore and New York,	82.97	"
Cape May, Delaware Bay and S. P.,	152.17	"
Central Railroad of New Jersey,	55.63	"
Delaware, Lackawanna and Western (Entire Line),	53.58	"
" " " (New Jersey),	57.45	"
Erie,	65.06	"
East Jersey Railroad and T. Co. (Railroad),	96.37	"
" " " " (Floating Equipment),	83.45	"
Hoboken Manufacturers,	85.72	"
Hudson and Manhattan,	43.40	"
Lehigh Valley,	59.95	"
Lehigh and Hudson River,	61.76	"
Lehigh and New England,	62.84	"
Mt. Hope Mineral,	50.02	"
New York, Susquehanna and Western,	59.85	"
Pennsylvania,	68.70	"
Port Reading,	35.61	"
Rahway Valley, Lessee,	90.94	"
Raritan River,	54.72	"
Tuckerton,	73.22	"
Union Transportation, Lessee,	84.31	"
West Jersey and Seashore,	75.76	"
Wharton and Northern,	69.71	"

COMPARATIVE STATEMENT OF TAXES PAID IN ALL STATES.

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COMPARATIVE STATEMENT SHOWING TAXES PAID BY RAILROADS IN EACH STATE FOR YEARS 1906 TO 1909, BOTH INCLUSIVE, ARRANGED ALPHABETICALLY BY STATES.

NAME OF STATE.	1906. Amount.	1906. Per Mile of Line.	1907. Amount.	1907. Per Mile of Line.	1908. Amount.	1908. Per Mile of Line.	1909. Amount.	1909. Per Mile of Line.	Percentage 1909 compared with 1906. Increase X; Decrease —.	
Alabama,	$862,635	190	$983,658	218	$1,369,057	295	$1,396,623	298	X	57.
Arkansas,	909,916	224	958,057	224	1,055,652	241	1,119,042	234	X	4.5
California,	1,962,675	325	2,390,389	390	3,195,314	494	3,299,273	498	X	53.
Colorado,	1,421,536	295	1,390,514	287	1,140,719	289	1,497,491	300	X	1.7
Connecticut,	1,241,680	1,220	1,360,234	1,339	1,609,895	1,593	1,693,772	1,686	X	38.2
Delaware,	103,763	310	131,282	391	114,538	340	141,639	421	X	36.
Florida,	583,738	170	615,142	176	708,563	187	770,732	198	X	16.5
Georgia,	973,759	158	1,068,654	166	1,281,106	196	1,285,021	194	X	22.8
Idaho,	379,488	244	399,937	233	579,193	312	547,864	288	X	18.
Illinois,	5,364,330	453	5,649,300	472	5,205,961	441	5,461,020	463	X	2.2
Indiana,	3,225,391	451	3,468,895	481	3,585,182	490	3,792,322	518	X	14.8
Iowa,	2,146,279	217	2,300,545	234	2,254,019	230	2,357,250	242	X	11.5
Kansas,	2,710,285	305	2,637,293	296	3,060,247	343	2,760,507	309	X	1.3
Kentucky,	1,096,530	333	1,213,161	366	1,104,258	333	1,236,719	369	X	10.7
Louisiana,	883,220	241	902,638	218	1,091,021	245	1,171,981	253	X	5.
Maine,	513,324	262	586,704	292	654,090	314	660,107	314	X	20.
Maryland,	842,230	597	861,931	620	910,245	675	975,556	711	X	19.
Massachusetts,	3,505,312	1,683	3,185,260	1,525	2,913,032	1,394	3,132,072	1,500	—	12.
Michigan,	4,584,723	554	3,408,883	398	3,422,858	396	3,599,755	424	—	30.6
Minnesota,	3,074,306	389	3,407,313	429	3,144,571	388	3,206,062	381	—	2.
Mississippi,	702,073	197	783,265	214	825,268	214	950,823	242	X	23.
Missouri,	1,642,600	209	1,629,914	206	1,471,194	187	1,548,796	196	—	6.6
Montana,	784,725	240	882,421	271	1,001,225	298	999,275	289	X	20.4
Nebraska,	1,389,174	240	2,546,264	429	1,858,096	309	1,873,305	311	X	29.6
Nevada,	312,033	235	409,646	265	502,088	283	522,806	291	X	23.8
New Hampshire,	411,101	333	441,713	358	467,327	379	496,375	402	X	20.7
New Jersey,	2,323,282	1,047	4,561,655	2,047	4,198,431	1,926	4,702,291	2,166	X	106.9
New York,	5,540,836	671	5,764,330	686	5,552,431	672	6,675,522	800	X	19.
N. Caroline,	685,914	176	704,533	177	870,207	211	899,381	213	X	21.
N. Dakota,	991,307	264	1,031,593	265	1,074,277	265	1,207,178	297	X	12.
Ohio,	4,686,549	519	5,080,488	569	5,102,702	576	5,339,622	599	X	15.6

NAME OF STATE.	1906. Amount.	1906. Per Mile of Line.	1907. Amount.	1907. Per Mile of Line.	1908. Amount.	1908. Per Mile of Line.	1909. Amount.	1909. Per Mile of Line.	Percentage 1909 compared with 1906. Increase X; Decrease —.	
Oklahoma,	591,292	212	544,984	194	1,046,490	187	2,643,603	460	X	112.2
Oregon,	357,731	211	391,737	228	527,342	297	861,482	446	X	111.4
Pennsylvania,	6,982,973	645	5,541,396	510	5,896,956	554	5,917,452	552	—	16.8
Rhode Island,	235,013	1,128	229,309	1,100	248,382	1,204	259,775	1,243	X	10.2
S. Carolina,	528,359	167	556,712	176	711,405	224	731,232	226	X	35.3
S. Dakota,	338,003	107	355,811	101	525,505	153	664,523	182	X	70.
Tennessee,	920,766	263	935,567	267	1,038,629	298	1,091,261	301	X	14.4
Texas,	1,417,765	118	1,910,682	153	3,098,759	243	2,456,776	189	X	60.
Utah,	549,395	313	575,081	320	686,266	381	672,446	375	X	20.
Vermont,	170,230	161	177,040	172	210,260	205	230,475	226	X	40.4
Virginia,	1,276,957	334	1,492,013	376	1,569,136	385	1,598,542	369	X	10.5
Washington,	1,164,352	354	1,443,564	415	1,933,175	549	2,080,051	507	X	43.2
W. Virginia,	622,736	214	1,237,049	413	1,391,699	471	1,426,232	467	X	118.2
Wisconsin,	2,707,201	387	3,009,273	414	2,965,945	409	3,153,703	440	X	13.7
Wyoming,	205,445	165	211,122	141	336,089	216	360,785	230	X	39.4
Arizona,	232,563	130	266,133	142	279,332	148	303,992	157	X	20.8
D. of Columbia,	42,473	459	46,345	1,480	29,675	944	36,539	1,036	X	125.7
New Mexico,	369,565	147	361,411	139	445,753	154	524,508	180	X	22.4

COMPARATIVE STATEMENT, SHOWING TAXES PAID BY RAILROADS IN EACH STATE FOR YEARS 1906 TO 1909, BOTH INCLUSIVE, ARRANGED ACCORDING TO AMOUNT OF TAXES PAID PER MILE FOR YEAR 1909.

NAME OF STATE.	1906. Amount.	1906. Per Mile of Line.	1907. Amount.	1907. Per Mile of Line.	1908. Amount.	1908. Per Mile of Line.	1909. Amount.	1909. Per Mile of Line.	Percentage 1909 compared with 1906. Increase X; Decrease —.	
New Jersey,	$2,323,282	1,047	$4,561,655	2,047	$4,198,431	1,926	$4,702,291	2,166	X	106.9
Connecticut,	1,241,680	1,220	1,360,234	1,339	1,609,895	1,593	1,693,772	1,686	X	38.2
Massachusetts,	3,505,312	1,683	3,185,260	1,525	2,913,032	1,394	3,132,072	1,500	—	12.
Rhode Island,	235,013	1,128	229,309	1,100	248,382	1,204	259,775	1,243	X	10.2
D. of Columbia,	42,473	459	46,345	1,480	29,675	944	36,539	1,036	X	125.7
New York,	5,540,836	671	5,764,330	686	5,552,431	672	6,675,522	800	X	19.
Maryland,	842,230	597	861,931	620	910,245	675	975,556	711	X	19.
Ohio,	4,686,549	519	5,080,488	569	5,102,702	576	5,339,622	599	X	15.6
Pennsylvania,	6,982,873	645	5,541,396	510	5,896,956	554	5,917,452	552	—	16.8
Indiana,	3,225,391	451	3,468,895	481	3,585,182	490	3,792,322	518	X	14.8
Washington,	1,164,352	354	1,443,564	415	1,933,175	549	2,080,051	507	X	43.2
California,	1,962,675	325	2,390,389	390	3,195,314	494	3,299,273	498	X	53.
W. Virginia,	622,736	214	1,237,049	413	1,391,699	471	1,426,232	467	X	118.2
Illinois,	5,364,330	453	5,649,300	472	5,205,961	441	5,461,020	463	X	2.2
Oklahoma,	591,292	212	544,984	194	1,046,490	187	2,643,603	460	X	112.2
Oregon,	357,731	211	391,737	228	527,342	297	861,482	446	X	111.4
Wisconsin,	2,707,201	387	3,009,273	414	2,965,945	409	3,153,703	440	X	13.7
Michigan,	4,584,723	554	3,408,883	398	3,422,858	396	3,599,755	424	—	30.6
Delaware,	103,763	310	131,282	391	114,538	340	141,639	421	X	36.
New Hampshire,	411,101	333	441,713	358	467,327	379	496,375	402	X	20.7
Minnesota,	3,074,306	389	3,407,313	429	3,144,571	388	3,206,062	381	—	2.
Utah,	549,395	313	575,081	320	686,266	381	672,446	375	X	20.
Kentucky,	1,096,530	333	1,213,161	366	1,104,258	333	1,236,719	369	X	10.7
Virginia,	1,276,957	334	1,492,013	376	1,569,136	385	1,598,542	369	X	10.5
Maine,	513,324	262	586,704	292	654,090	314	660,107	314	X	20.
Nebraska,	1,389,174	240	2,546,264	429	1,858,096	309	1,873,305	311	X	29.6
Kansas,	2,710,285	305	2,637,293	296	3,060,247	343	2,760,507	309	X	1.3
Tennessee,	920,766	263	935,567	267	1,038,629	298	1,091,261	301	X	14.4
Colorado,	1,421,536	295	1,390,514	287	1,140,719	289	1,497,491	300	X	1.7
Alabama,	862,635	190	983,658	218	1,369,057	295	1,396,623	298	X	57.

NAME OF STATE.	1906. Amount.	1906. Per Mile of Line.	1907. Amount.	1907. Per Mile of Line.	1908. Amount.	1908. Per Mile of Line.	1909. Amount.	1909. Per Mile of Line.	Percentage 1909 compared with 1906. Increase X; Decrease —.	
N. Dakota, ...	991,307	264	1,031,593	265	1,074,277	265	1,207,178	297	X	12.
Nevada, ...	312,033	235	409,646	265	502,088	283	522,806	291	X	23.8
Montana, ...	784,725	240	882,421	271	1,001,225	298	999,275	289	X	20.4
Idaho, ...	379,488	244	399,937	233	579,193	312	547,864	288	X	18.
Louisiana, ...	883,220	241	902,638	218	1,091,021	245	1,171,981	253	X	5.
Iowa, ...	2,146,279	217	2,300,545	234	2,254,019	230	2,357,250	242	X	11.5
Mississippi, ...	702,073	197	783,265	214	825,268	214	950,823	242	X	23.
Arkansas, ...	909,916	224	958,057	224	1,055,652	241	1,119,042	234	X	4.5
Wyoming, ...	205,445	165	211,122	141	336,089	216	360,785	230	X	39.4
S. Carolina, ...	528,359	167	556,712	176	711,405	224	731,232	226	X	35.3
Vermont, ...	170,230	161	177,040	172	210,260	205	230,475	226	X	40.4
N. Carolina, ...	685,914	176	704,533	177	870,207	211	899,381	213	X	21.
Florida, ...	583,738	170	615,142	176	708,563	187	770,732	198	X	16.5
Missouri, ...	1,642,600	209	1,629,914	206	1,471,194	187	1,548,796	196	—	6.6
Georgia, ...	973,759	158	1,068,654	166	1,281,106	196	1,285,021	194	X	22.8
Texas, ...	1,417,765	118	1,910,682	153	3,098,759	243	2,456,776	189	X	60.
S. Dakota, ...	338,003	107	355,811	101	525,505	153	664,523	182	X	70.
New Mexico, ...	369,565	147	361,411	139	445,753	154	524,508	180	X	22.4
Arizona, ...	232,563	130	266,133	142	279,332	148	303,992	157	X	20.8

ASSESSMENT OF GENERAL PROPERTY.

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ASSESSMENT OF GENERAL PROPERTY.

Charles Hansel, Expert in Charge,
Revaluation of Railroads and Canals,
State of New Jersey,
Elizabeth, N. J.

DEAR SIR—Complying with your instruction I herewith transmit a statement of my observations of the conditions attendant upon the assessment of general property throughout the State, and append a tabulated statement of the rates of compensation paid to Assessors, together with information concerning maps and records furnished Assessors.

One of the problems encountered in the reappraisal of the railroad and canal property in New Jersey was the ascertainment of the true value of the land owned and used by these corporations in the State, and in order to make this appraisal as nearly accurate as possible, information concerning the lands of the railroad and canal companies and the land adjoining was gathered from every available source, one of which was the collection of the assessed valuation of the adjoining land from the assessors of the various taxing districts. This information was supplied by most of the assessors and the County Tax Boards at much pains, and without any cost to the State.

It was only natural that in gathering and collating the information obtained from the assessors and County Tax Boards that a general familiarity with the taxing methods of the State and the conditions under which assessments are made should be had, and I deem it my duty to lay before the Governor and the Board, the results of this investigation, if such it may be called, to the end that the defects discovered may be remedied and the taxing system of the State be placed on a more stable and equitable basis. The comment that follows is the result of many visits to and conferences with each of the twenty-one (21) County Tax Boards in New Jersey, personal interviews with assessors and discussions with many taxpayers, both large and small.

What we are pleased to call a tax system consists of a collection of ambiguous laws, the enforcement of which is placed with Boards, which really have no power to enforce them, and one of the things that appeals strongly to those persons interested in taxation in this State is the fact that no attempt has been made by Legislatures in recent years to remedy this condition. On the contrary each year sees the enactment of new tax laws which serve to make more complex than ever the general scheme of taxation. No effort is made to better the conditions of the man who does the actual work of assessment; no effort is made to have him properly compensated for his work and, except in rare cases nothing has been done to supply him with facilities to carry on his work in compliance with the law, which says that all property shall be taxed at its true value under uniform rules.

It is no wonder, then that complaint is general throughout the State, that much unequality and discrimination exists. It is evident to all persons who have observed the working of our tax laws that injustice in the form of inequitable assessment does exist in the taxation of both real and personal property, the result of which is an unequal and unjust distribution of the burdens of taxation. In some taxing districts property is assessed at nearly its true value—in some instances it is claimed at more than its true value. In other districts under-assessment is general, the percentage of assessed valuation in some cases going as low as twenty (20%) per cent. of its true value. In some instances this under-assessment is intentional, and results in the taxpayers of these particular districts paying less than their fair proportion of the State School and County Tax. I have no doubt that in some of the taxing districts of the State where there is under-valuation that the assessors are honestly endeavoring to comply with the law, and in those cases this under-valuation may be accounted for, mostly by error of judgment and the fear of over-valuation; but this is the exception, not the rule.

It is not fair to charge the responsibility for this under-assessment to the assessors themselves, but rather the responsibility should be placed on the efforts of the individuals to secure lower assessments on their respective properties notwithstanding the

provisions of the law. This effort on the part of the individual is responsible in a large degree for the inequality that now exists. In theory every person shall contribute to the support of the Government in the way of taxes in proportion to the value of the property owned by him which is subject to taxation; consequently the existence of inequality means that individual owners are made to bear their unequal proportion of the tax burden. In some taxing districts of the State this inequality is greater than in others, depending upon the extent to which the assessor allows local conditions to affect his judgment in making assessments. The average taxpayer is perfectly willing to pay his fair proportion of taxes, but he objects strongly, and justly, too, when he finds his neighbor paying a lesser proportion than he.

The value of properties for the purpose of assessment or any other purpose can be determined by only one standard of value and that is the one prescribed by statute; any other standard is a violation of law. The only way in which the persistent efforts of individual taxpayers to secure a low assessment on their property for the purpose of taxation can be remedied is by the removal of the most important question of taxation, so far as possible, from the field of politics, proper compensation for the assessors, and by a fixed determination on the part of the assessors to perform their duties strictly in accordance with the provisions of the law, under the guidance of a County Board, which should have complete control of the assessors in fact, not in theory, as is now the case with the present County Tax Boards.

One of the special causes for this inequality and discrimination is the elective assessor. Another is the poor compensation given to assessors. Still another is the poor facilities afforded to the assesor for doing his work. A general comparison between work of the appointive and the elective assessor speedily convinces me that the former method of choosing assessors is far preferable, so far as results are concerned. It is a fact well known to many of the elective assessors in this State that at times preceding their election individual taxpayers have come to them and told them they would not get their votes because the assessor had raised their assessment to what he considered true value of

the property. The individual did not dispute the assessor's judgment, so far as the value was concerned, but it was simply a case of endeavoring by threats to evade his full share of responsibility in the common burden of taxation.

At least one County Tax Board will bear me out when I say that more than one elective assessor has publicly asserted that if they attempted to assess property in their districts at anything like a fair proportion of its value they could not be re-elected. In all fairness, however, the elective assessor should not be charged with any sympathy for this condition, except in occasional cases. Most of those assessors with whom I have talked had no hesitancy in saying that they preferred to be appointed under a sort of civil service, so that if they performed their duty faithfully and conscientiously they would not be turned out of office. But it is not fair to the taxpayers in other parts of the State that such conditions should exist.

Many examples of the way in which the law is not carried out by assessors, and of inequality as they now exist have been brought to my attention, but they were so numerous that it is unnecessary to quote all of them. In one of the counties in the northern end of the State, for instance, a lawyer who had just passed title to a piece of property called my attention to the fact that the consideration named in the deed, which was for an eight (8 acre farm, called for a payment of $3,200, or at the rate of $400 per acre. In examining the tax bill for this property for the last year he found that it was assessed for $600, or at the rate of $75 per acre.

In another county in the southern end of the state my attention was called to a case of an owner of a duck farm who had more than 2,000 of these birds there, in addition to about 25 incubators and a good bit of ground. It happened that some dogs got into his place and killed off 600 of the ducks, so the Town Council got together and awarded him $471, for the loss of the ducks, which they made up by placing an additional tax upon the owners of dogs in the township. After paying this money the Council thought they would look up the man's assessment and found that he was being assessed on only $700 worth of property, both real and personal. Of course this did not strike

the Council very favorably, they had just paid him $471 and he still had over 1,500 ducks, his incubators and his land left, so they went to the County Tax Board and asked that his assessment be increased.

When the owner of the farm appeared before the County Tax Board he said the assessor had not been near him for two years, and that of course he was not going to look for the assessor. The County Tax Board increased his assessment to $2,000, because the Town Council thought that would be fair, although it was still less than the true value of the property.

In still another South Jersey County where the Tax Board is active, the valuations of the assessors of one of the Townships was raised about $150,000 by the Board. Soon after a friend of the assessor called on the President of the Board and asked that this increase be taken off, saying that the assessor was running for re-election that fall and that the increase would probably have a bad effect.

The President refused to do it; two days afterward he was visited by another friend of the assessor who again asked that the increase be taken off. The President then told this other friend of the assessor that the reason he was so anxious to see the assessments put back to the old figures was that the assessor was running for re-election. This second friend of the assessor answered by saying that that condition did not figure as the assessor has been nominated on both tickets and had no opposition, so pleased were the residents of his community with his work. No argument had been made that the increases ordered by the Tax Board were unfair, it was simply a case of the taxpayers of a district with the aid of their assessor trying to shirk their fair share of the burden of taxation.

In one of the rural counties in the Northern part of the State an assessor was elected a year ago and when the time came for turning in his ratables to the County Tax Board he brought in his books without a line written in them. Taken to task by the Tax Board he said he knew nothing about taxation and that he needed a little money and some of his friends nominated and elected him. By dividing his salary with another man who was supposed to know something about values in this Township, and

with the aid of the County Collector and the Secretary of the County Tax Board an assessment for this Township was fixed up for last year. What will happen this year is problematical.

One assessor was perfectly frank in telling me that he purposely kept down valuations in his taxing district because the residents demanded it. He pointed out that there was a large amount of railroad property in his district and that the taxpayers felt that they were being unjustly treated when this railroad property was assessed by the State and only a part of it returned to their municipality. They felt that so long as they had so much railroad property located there, they should have the full benefits accruing from its taxation, and, not getting it, they insisted that their assessor, who was an elective one, keep down their valuations as low as possible, so they could even up things by paying less than their fair proportion of the County Tax and the State School Tax.

In still another county in the northern part of the State I found some good shore front property lumped together with some interior land and assessed as a whole for a little more than $200 an acre. The interior land was worth not less than $600 an acre, while the exterior land could not be bought for less than $1,000 an acre. This condition I understand has been remedied to a certain extent since I called the attention of the County Tax Board to it.

I have been told that in a City in the North end of the State valuations of all property were raised to pretty near true value, the object being to make the city appear exceedingly prosperous and therefore attract manufacturers. This high assessment lasted only one (1) year, for when the people went to pay their taxes they found that their share of the County Tax and the State School Tax was so largely out of proportion to that paid by the other municipalities in their County, that the following year a return was made to the old system.

Dozens of cases of a similar nature as the above have been brought to my attention, but I have only quoted a few so as not to weary the reader.

On the other hand I found that, as a rule, assessors in first and second class cities, who are appointed—except in the city of

Elizabeth—endeavor to carry out the provisions of the law regarding the assessment of property at its true value. In fact complaint has been made that they are too zealous in carrying out the provisions of the law. In some instances they have assessed property at more than its true value. In the city of Elizabeth there are twelve (12) assessors, one (1) for each ward, the result of which is twelve (12) different methods of assessment. All are elected, and those taxpayers of the city with whom I have talked and whose opinion I consider weighty enough to listen to, told me that there was much dissatisfaction and that the City would be much better off with a smaller Board appointed by the Mayor.

Another interesting feature of our taxing methods is the assessment and collection of taxes on personal property, also the poll tax. It doesn't seem quite fair that workmen in the city of Plainfield, receiving probably $15 or $18 a week, should be compelled to pay taxes on $100 worth of his household goods and also pay a poll tax, while his wealthier neighbor in other parts of the State escape not only the payment of anything like their fair proportion of personal tax, but also pay no poll tax as well.

The city of Newark has a taxing system which is worthy of emulation by every other city in the State. I am told that the Tax Board of New York City has practically adopted the system in use in the City of Newark. It consists of a Board of Five (5) Commissioners of Assessment which has twenty-five (25) field men and clerks under its supervision. This department devotes its entire time to the assessment of property in the city of Newark. Just as soon as the assessment for one year has been completed, men start out on the work of the following year's assessment.

In Newark the unit rule is adhered to strictly, that is, a depth of 100 feet is taken for the front foot valuations of an entire block. Any plots less than 100 feet in depth are assessed on a fixed percentage of the unit. Those plots which run more than 100 feet in depth are of course assessed on the unit with the extra depth added to it. Property in Newark is divided into two sections, the business section and the residential section,

and the unit values in these sections vary considerably. In the business section the first 25 feet of a lot the Board holds is the most valuable part of the lots, so it is therefore assessed at 50% of the value of the unit, that is, the depth of 100 feet.

In the residential section the reverse is the case, for the first 25 feet in this section contains, according to the Board, only 14% of the value of the 100 ft. lot. Complete records of everything that is helpful in arriving at true value are kept by the Newark Tax Board. In a nutshell the taxing system of Newark is based on a scientific method of assessment and so successful has it been that appeals are exceptionally few. One of the things in connection with the Newark Tax Board that struck me rather forcibly was the fact that every City Employee is compelled to pay on a personal tax of $100 a year. This assessment is made on the theory that as the City furnished their income, it is only fair that they should contribute a small amount to the cost of running the City Government.

In Trenton the unit system is also used to good advantage. In Atlantic City the same system is used, but no City in the State has a more comprehensive or up-to-date system than the City of Newark.

The State Board for the Equalization of Taxes in their report for the year 1910 discuss the elective assessor in the following manner: "Among the problems of taxation none is more difficult and at the same time more essential than the problem of securing an assessment of property under general laws and by uniform rules, according to its true value. The State Constitution and the general tax act require such an assessment. The Courts of New Jersey have settled beyond all question that true value, within the meaning of the Constitution, is market value or exchangeable value in cash. The duty of the assessing officer, therefore, is plain and mandatory. The difficulty arises in performing the duty. That the duty is not always efficiently performed is due sometimes to the difficulty in determining the true value of the property to be assessed, but more often to the inherent defects in the machinery of assessment. The serious defect is that it requires, in most taxing districts, that the assessors shall be elected.

The theory upon which this plan is based may be highly attractive, but it does not stand the test of practical operation. Many elective assessors are intelligent men who try conscientiously to perform the duty imposed upon them. The trouble, as a rule, is not with the men but with the system. The system makes it very difficult to obtain assessors who will be unbiased judges of property values, who will be impervious to local influences, who will not be affected by political consideration and whose sole aim will be to secure an assessment of all property within their jurisdiction at its true value. The tenure of the assessor in many cases is made to depend not upon a faithful discharge of his duty under the law, but upon the extent to which he is willing to disregard the law.

He is bound to feel that his own interests and the interests of his constituency are best served by low assessments, rather than assessment at true value. His judgment as to value is inevitably influenced by local, political, personal and business considerations, and yet in no other position of public trust is there a more imperative need for absolute independence and scrupulous fidelity to the plain dictates of the law, than in that of the Assessor."

The other cause which has so much to do with inequality of our system of taxation is the compensation, or rather the lack of compensation, of the assessor. The laborer is worthy of his hire. Is it any wonder then that complaints of inequalities of assessment are general when we find the average salary of the rural assessor around $50 or $60 per year?

In one taxing district of the State, the Borough of Rivervale in Bergen County, the assessor receives the sum of One ($1.00) dollar a year, but there is a reason for this small salary, as the Borough is so heavily in debt that none of the officials accept any salary except the nominal sum of $1 a year. It does not seem quite fair to this assessor to ask him to do his work for nothing, and it does not seem quite fair to the taxpayers of the rest of the State either.

In another of the taxing districts of New Jersey, that of the Borough of Wood Lynne, in Camden County, the assessor re-

ceives the munificent sum of $10 per year for assessing approximately $280,000 worth of property. It does not speak well of the residents of Wood Lynne Borough that they consider so important an office as that of assessor worth only $10 per year.

In the rural sections of the State, the assessor is compelled to do his work without the aid of a map. Any assessment made without this necessary instrument is at best, guesswork. Shortsightedness on the part of the governing body and taxpayers of the rural communities is responsible, not alone for the poor compensation of the assessors, but for the lack of a map, although in some instances other reasons than alleged economy is the motive. I have been told that in some communities which have recently supplied their assessors with maps, that the assessment on the amount of property which had heretofore escaped taxation was so great as to more than pay for the cost of the maps.

The elective assessor, however, is not the only one who is not properly compensated for the work that he does. In some of the Cities the pay given the assessors is entirely inadequate for the amount of work that they are called upon to perform. In Paterson, Atlantic City, Trenton and Camden the compensation paid the assessors is entirely too small for the amount of work that those officials perform each year.

The taxing system of New Jersey—we will call it such for the purpose of convenience—is composed of the assessors, that is, the men in the field who do the actual work of assessment; the County Tax Board, of three (3) members each, and the State Board for the Equalization of Taxes. This organization is supposed to have complete control of the assessment of all real and personal property in the State with the exception of first and second class railroad property, the franchise of Public Service. Corporations and the franchise tax imposed on miscellaneous corporations chartered under our law which are assessed by a special Board, known as the State Board of Assessors, which performs no other duty.

Under the present laws of New Jersey the tax assessor of New Jersey is a law unto himself. In some parts of the State he is elected, in other parts appointed, and he cannot be removed for incompetence or any violation of the law unless it shall have

been proved that he violated the law wilfully and intentionally and then can only be removed after a hearing before the State Board. It does not matter how incompetent the assessor may be, how unequal his assessments may be or how ignorant as to the duties of his office, no way can be found to remove him or even discipline him. The only power that either the County Tax Board or the State Board for the Equalization of Taxes has is to make a new assessment, which mostly entails an extra burden in the community, and even after this new assessment has been made the assessor the following year can revert to his old figures and the Board cannot remove him.

Not long ago the State Board for the Equalization of taxes had an assessor from one of the North Jersey Counties before it on charges of incompetency and ignorance. The trial convinced the Board that this assessor was unfit to hold office, but it could not remove him, because it had not been shown that the assessor had neglected his work wilfully and intentionally.

Another example of the lack of power of the State Tax Board was shown not long ago. The State Board issued an order saying that all land, excepting farm land, should be separated from the improvements thereon for the purpose of assessment. Thus far not more than six (6) out of the twenty-one (21) Counties in the State have complied with this rule, and in fact I have been told that there is one County where the old method of assessing land and buildings together is carried out in every district. As a result of this lack of authority on the part of the State Tax Board and the County Tax Board the various elective assessors do pretty near what they please because they know that they are immune from removal.

Of course the law creating County Tax Boards gives these Boards control of the assessors as far as the enforcement of the law is concerned, but this is a paradox, as no method is provided in the law for the enforcement of this control. No way is provided by which the County Tax Board can discipline or remove incompetent assessors and the result has been that in many cases County Tax Boards have been unjustly criticised for not carrying out the provisions of the tax laws, when their power to do so has been extremely limited.

If the various County Tax Boards were given real power over the assessors, that is, if they had the appointment and removal of assessors, this condition would not exist, and no reason would remain for the law regarding taxation not being carried out in every part of the State.

The State Tax Board, too, is operating under a very ambiguous law. It has no power to take the initiative so far as the investigation of unequal taxation is concerned, for their act provides that they shall only on complaint enter into an investigation of this character. As the Board is now constituted it is practically a Tax Court. It seems reasonable to suggest that its power should be enlarged so that its members may on their own initiative investigate taxing conditions throughout the State and apply the remedies; then the Board could be held to strict accountability for the carrying out of the tax laws of the State.

The following tables, containing information supplied to us by the various County Tax Boards of the State, show the compensation of the assessors, the amount of their ratables, the per cent. the salaries are of the ratables, the manner in which they are selected and whether or not they have maps.

Respectfully Submitted,

W. F. KEOHAN,

Special Assistant.

ATLANTIC COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Atlantic City,	App.	$64,375,621	3–$1,200 ea.	.0056
Ventor "	Elected	3,733,757	500	.0134
Hammonton Town,	"	1,877,707	1– 200 2– 75 ea.	.056
Pleasantville Bor.,	"	1,226,605	600	.049
Egg Harbor City,	"	852,246	275	.032
Hamilton Township,	"	842,362	400	.0475
Longport Borough,	"	826,915	125	.0125
Galloway Township,	"	786,058	550	.070
Egg Harbor "	"	751,978	450	.060
Somers Point,	"	564,109	2– 100 ea.	.0355
Buena Vista Twp.,	"	524,825	300	.057
Northfield City,	"	368,197	2– 75 ea.	.0407
Absecon "	"	345,799	2– 60 ea.	.0348
Mullica Township,	"	294,322	175	.0595
Linwood Borough,	"	287,830	75	.0261
Brigantine City,	"	284,840	2– 75 ea.	.052
Weymouth Township,	"	215,668	200	.093
Port Republic City,	"	95,280	2– 25 ea.	.052
Folsom Borough,	"	56,665	25	.044

The following districts have maps: Atlantic City, Ventor, Margate City, Egg Harbor City and Hammonton.

BERGEN COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
New Barbadoes Twp.,	Elected	$11,817,166	$1,800	.0152
Englewood City,	"	10,029,974	4— 200 ea.	.0079
Ridgewood Twp.,	"	6,482,877	1,000	.0154
Rutherford Bor.,	"	6,128,290	800	.0131
Edgewater "	"	5,400,083	600	.0111
Overpeck Township,	"	3,364,521	550	.0164
Fort Lee Borough,	"	2,900,740	500	.0172
Union Township,	"	2,777,445	800	.0289
Garfield Borough,	"	2,692,709	500	.0186
Cliffside Park Bor.,	"	2,490,725	250	.0102
East Rutherford Bor.,	"	2,281,587		
Tenafly "	"	2,273,150	300	.0132
Lodi "	"	2,000,000	400	.020
Hasbrouck Heights Bor.,	"	1,802,360	250	.0139
Leonia Borough,	"	1,767,820	150	.0085
Saddle River Township,	"	1,603,291	400	.0250
Westwood Borough,	"	1,596,327	200	.0125
Teaneck Township,	"	1,581,368	400	.0253
Fairview Borough,	"	1,518,111	150	.0099
Delford "	"	1,447,684	200	.0138
Carlstadt "	"	1,368,567	300	.0220
Franklin Township,	"	1,329,206	250	.0188
Midland "	"	1,310,535	325	.0248
Ridgefield Borough,	"	1,309,029	150	.0115
Hohokus Township,	"	1,263,239	300	.0238
Palisades Park Bor.,	"	1,205,100	200	.0166
Bogota Borough,	"	1,189,341	300	.0252
Park Ridge Borough,	"	1,098,375	150	.0136
Bergenfield "	"	1,075,525	200	.0186
Dumont "	"	973,119	225	.0232
Closter "	"	907,616	200	.0220
Maywood "	"	860,675	200	.0232
Little Ferry Bor.,	"	829,925	200	.0242
Hillsdale Township,	"	795,581	100	.0126
Glen Rock Borough,	"	763,591	100	.0131
Englewood Cliffs Bor.,	"	737,345	100	.0135
Midland Park Bor.,	"	705,219	125	.0177
Palisades Township,	"	704,632	200	.0284
Haworth Borough,	"	723,105	75	.0104
Wallington "	"	684,075	200	.0292
Woodridge "	"	683,312	40	.0058
Riverside "	"	662,663	125	.0189
Ramsey "	"	645,260	125	.0194
Demarest "	"	638,319	75	.0117

BERGEN COUNTY—*Continued.*

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Alpine Borough,	Elected	$589,505	125	.0212
North Arlington Bor.,	"	585,325	100	.0171
Ho-Ho-Kus Borough,	"	574,431	50	.0087
Oakland "	"	553,352	100	.0181
Cresskill "	"	539,179	150	.0278
Emerson "	"	517,475	150	.0290
Norwood Borough,	"	510,081	75	.0147
Allendale "	"	509,897	75	.0147
Woodcliff Lake Bor.,	"	476,506	100	.0210
Rivervale Township,	"	437,314	1	.00022
Harrington Park Bor.,	"	384,008	75	.0195
Saddle River Borough,	"	377,100	75	.0199
Orvil Township,	"	373,811	50	.0134
Montvale Borough,	"	364,861	100	.0274
Moonachie "	"	267,454	75	.0281
Harrington Township,	"	262,936	100	.0380
Upper Saddle River Bor.,	"	228,450		
Washington Township,	"	222,575	50	.0225
Old Tappan Bor.,	"	207,950	60	.0289
Lodi Township,	"	112,714		

The following districts have maps: Ridgewood Township, Teaneck Township, Union Township, Washington Township, Carlstadt Borough, Cliffside Park Borough, Closter Borough, Demarest Borough, East Rutherford Borough, Edgewater Borough, Englewood Cliffs Borough, Garfield Borough, Hasbrouck Heights Borough, Leonia Borough, Lodi Borough, Midland Park Borough, Palisades Park Borough, Ridgefield Borough, Rutherford Borough and Westwood Borough.

BURLINGTON COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Chester,	Elected	$3,536,622	$500 00	.01418
Burlington City,	"	3,357,969	550 00	.01640
Northampton,	"	2,393,990	600 00	.0251
Riverton,	"	1,579,597	150 00	.0095
Riverside,	"	1,534,845	300 00	.0195
Florence,	"	1,437,999	300 00	.0208
Palmyra,	"	1,235,104	300 00	.0242
Bordentown City,	"	1,227,736	108 25	.00885
Beverly Township,	"	1,103,183	100 00	.00905
Medford,	"	1,010,362	300 00	.0296
Springfield,	"	908,582	150 00	.0165
Mount Laurel,	"	887,266	200 00	.0226
Southampton,	"	881,928	200 00	.0227
Mansfield,	"	866,404	150 00	.0173
Chesterfield,	"	854,841	100 00	.01170
Lumberton,	"	787,602	200 00	.0254
Pemberton Township,	"	746,282	150 00	.0201
Evesham,	"	737,268	150 00	.0204
Burlington Township,	"	698,684	125 00	.0179
Beverly City,	"	674,410	100 00	.0148
Cinnaminson,	"	532,934	150 00	.0281
North Hanover,	"	498,955	75 00	.0151
New Hanover,	"	491,184	75 00	.0153
Pemberton Borough,	"	392,150	50 00	.01275
Delran,	"	352,483	75 00	.0212
Westhampton,	"	337,626	60 00	.0178
Willingboro,	"	289,152	75 00	.0260
Easthampton,	"	280,818	79 00	.0281
Bordentown Township,	"	279,350	60 00	.02150
Bass River,	"	262,011	60 00	.0229
Tabernacle,	"	197,615	100 00	.0506
Washington,	"	191,613	100 00	.0522
Woodland,	"	169,977	50 00	.0294
Shamong,	"	165,374	75 00	.0453
Fieldsboro,	"	105,609	30 00	.0284

The assessors have no maps nor has the county a map.

CAMDEN COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Camden City,	App.	$51,136,294	5–$1,500 each.	.01465
Gloucester City,	Elected	3,653,850	900	.0246
Collingswood Bor.,	"	3,337,797	350	.0104
Haddonfield Bor.,	"	3,115,100	450	.0144
Merchantville Bor.,	"	1,877,209	400	.0213
Pensauken Township,	"	1,837,375	700	.0381
Clementon Township,	"	1,317,391	400	.0303
Centre Township,	"	1,191,352	400	.0336
Haddon Heights,	"	1,130,796	75	.0066
Delaware Township,	"	1,095,135	400	.0365
Gloucester Township,	"	902,485	200	.0222
Winslow Township,	"	895,625	300	.0334
Haddon Township,	"	839,613	200	.0238
Audobon Borough,	"	792,096	100	.0119
Voorhees Township,	"	529,320		
Berlin Township,	"	504,050	200	.0398
Oaklyn Borough,	"	400,275		
Waterford Township,	"	365,515	125	.0342
Wood Lynne Borough,	"	238,650	10	.0042
Chesilhurst Borough,	"	54,961	60	.0109

The assessors do not have maps. There is an atlas published of Camden and vicinity.

CAPE MAY COUNTY.

Taxing District.	*How Chosen.*	*1909 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Cape May City,	Elected	$5,833,641	$500	.0085
Ocean City,	"	5,200,919	1– 480 1– 540	.0196
No. Wildwood Borough,	"	2,228,277	275	.0123
Holly Beach Borough,	"	2,019,427	300	.0148
Wildwood Borough,	"	1,982,029	200	.0101
Sea Isle City,	"	1,326,111	1– 100 1– 125	.017
Lower Township,	"	1,249,958	200	.016
Middle Township,	"	1,200,542	375	.0312
Wildwood Crest,	"	1,059,679	200	.0188
Upper Township,	"	586,418	200	.0341
Dennis Township,	"	563,742	250	.044
Avalon Borough,	"	471,105	125	.0265
Woodbine Borough,	"	460,898	150	.0326
West Cape May Borough,	"	340,826	300	.0088
Cape May Point Borough,	"	247,130	100	.0405
So. Cape May Borough,	"	54,565	100	.0183

The cities and boroughs have maps, but the townships have none, neither is there a county map.

CUMBERLAND COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Bridgeton, ...	App.	$6,963,701	3– $300 each.	.0129
Millville City, ...	Elected	5,474,864	4 Assessors 15c. per name.	
Vineland Borough, ...	"	2,623,727	500	.019
Landis Township, ...	"	1,918,434	450	.0234
Deerfield Township, ...	"	1,075,392	300	.028
Hopewell Township, ...	"	1,030,991	150	.0145
Lawrence Township, ...	"	800,510	200	.025
Maurice River Township, ...	"	759,379	300	.0396
Commercial Township, ...	"	743,764	300	.0403
Fairfield Township, ...	"	569,733	12c. per name.	
Greenwich Township, ...	"	541,911	125	.0231
Stow Creek Township, ...	"	481,106	110	.0228
Downe Township, ...	"	480,700	165	.0343

The borough of Vineland is the only municipality in this county that has a map.

ESSEX COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Newark,	App.	$344,821,700	$2,500	.0134
East Orange,	"	47,784,424	1,300	.0165
Montclair,	"	35,546,695	2– 1,000 Sec. 1,800	.0245
Orange,	"	20,025,416	800	.0120
Bloomfield,	"	10,176,994	500	.0147
South Orange Village,	"	9,044,031	500	.0055
West Orange,	1 Elected 2 App.	8,970,472	2– 700 Sec. 800	.0245
Irvington,	2 App.	7,917,523	2– 200 Sec. 600	.0126
Belleville,	Elected	6,219,093	1,000	.0161
Glen Ridge,	"	5,825,552	600	.0103
So. Orange Township,	"	4,657,073	800	.0172
Nutley,	"	4,583,570	750	.0164
Milburn,	"	3,997,845	500	.0125
Caldwell Borough,	"	1,743,930	250	.0143
Verona,	"	1,512,340	250	.0165
Essex Fells,	"	806,338	150	.0186
Livingston,	"	607,630	200	.0298
Cedar Grove,	"	586,229	250	.0043
Caldwell Township,	"	418,455	100	.0239
West Caldwell,	"	410,700	100	.0244
Roseland,	"	301,600	75	.0249
North Caldwell,	"	285,800	40	.0151

Newark, in addition to the five assessors, has twenty-five assistant assessors, whose salaries range from $1,200 to $1,500. The cost of the Newark Tax Board is averaged at 50c. an assessment.

The county has no official map, but an atlas published by A. H. Mueller, of Philadelphia, same being now five years old.

The following districts have maps: Newark, Orange, East Orange, West Orange, Montclair, Bloomfield, Irvington, Nutley, Belleville, South Orange Township, South Orange Village, Caldwell Borough, Verona, Cedar Grove, and Glen Ridge.

GLOUCESTER COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Woodbury City, ...	Elected	$3,421,630	3– $150 each.	.013
Pitman Borough, ...	"	1,470,525	350	.0238
Glassboro Township, ...	"	1,257,750	300	.0239
West Deptford Township, ...	"	1,174,950	300	.0255
Monroe Township, ...	"	1,157,581	300	.0260
Harrison Township, ...	"	1,152,234	300	.0260
Paulsboro Borough, ...	"	1,142,900	200	.0175
Deptford Township, ...	"	1,131,100	200	.0177
Clayton Borough, ...	"	1,036,375	175	.0169
Swedesboro Borough, ...	"	963,427	125	.0130
Manuta Township, ...	"	889,850	250	.0282
Logan Township, ...	"	820,375	200	.0244
Franklin Township, ...	"	814,770	300	.0368
Woolwich Township, ...	"	785,358	140	.0178
Greenwich Township, ...	"	769,294	175	.0228
East Greenwich Township, ..	"	766,750	150	.0196
Washington Township, ...	"	719,800	200	.0278
Wenonah Borough, ...	"	637,667	100	.0157
So. Harrison Township, ...	"	595,241	175	.0294
Elk Township, ...	"	424,478	125	.0295
National Park Borough, ...	"	231,038	100	.0433

Boroughs have maps and there is an atlas published of Woodbury and vicinity.

HUDSON COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Jersey City,	App.	$241,560,768	3– $2,500 each.	.0031
Hoboken,	"	67,678,933	5– 1,200 each.	.0088
Bayonne,	"	46,531,618	1,800	.0038
West Hoboken, 2 1	App. Elected	23,101,313	1– 1,200 2– 900 each.	.0129
Kearny,	App.	17,752,430	3– 500 each.	.0084
Weehawken,	Elected	15,716,095	1,200	.0076
Union Town,	App.	13,215,061	500	.0113
West New York,	"	11,983,596	1,200	.01
North Bergen,	Elected	10,510,140	1,000	.0095
Harrison,	App.	10,496,733	900	.0086
East Newark Borough,	Elected	3,356,463	300	.0089
Secaucus Borough,	"	3,122,229	300	.0096
Guttenberg,	App.	2,905,440	300	.0103

Jersey City—All necessary clerical help supplied.

North Bergen—Assessor pays clerk if used.

Secaucus—Assessor employs clerks.

West Hoboken—Elective is clerk of board. Assessor employs clerks.

Union Town—Assessors pay assistants.

Weehawken—Assessor employs clerk.

Guttenberg—Has one assistant to serve all year; appointed by mayor and council at $200.

Kearny—One assessor acts as clerk; $300 extra.

Harrison—Assessor does work himself; no clerks.

East Newark—Assessor does work himself; no clerks.

HUNTERDON COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Lambertville,	Elected	$2,331,421	1–$109 71 1– 116 74 1– 155 87	.0164
Flemington Borough,	"	1,745,483	200 00	.0114
Readington Township,	"	1,382,369	310 00	.0224
Holland Township,	"	1,299,689	165 00	.0127
Clinton,	"	1,257,637	300 00	.0239
Delaware,	"	1,119,795	375 00	.0335
Raritan,	"	1,108,254	360 00	.0325
Hampton Borough,	"	1,105,329	100 00	.0091
Tewksbury Township,	"	1,015,836	150 00	.0148
East Amwell Township,	"	929,629	186 00	.0200
High Bridge Borough,	"	898,846	100 00	.0111
Lebanon Township,	"	855,256	205 00	.0237
Franklin Township,	"	809,794	175 00	.0216
Kingwood,	"	779,168	215 00	.0276
Alexandria Township,	"	666,834	150 00	.0225
Union Township,	"	646,222	145 00	.0224
Clinton Town,	"	634,706	110 00	.0173
Frenchtown Borough,	"	579,180	110 00	.0190
Bethlehem,	"	554,251	147 50	.0266
West Amwell Township,	"	474,090	130 00	.0274
Bloomsbury Borough,	"	357,718	35 00	.0098

There are no official maps of either separate taxing districts or county map.

MERCER COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Trenton City, ...	App.	$68,543,071	4– $1,400 each.	.0082
Hamilton Township, ...	Elected	4,552,250	550	.0121
Princton Borough, ...	"	4,355,878	250	.0057
Hopewell Township, ...	"	1,926,040	350	.0182
Princton Township, ...	"	1,894,153	200	.0105
Lawrence Township, ...	"	1,454,550	400	.0275
Ewing Township, ...	App.	1,407,157	150	.0107
Hightstown Borough, ...	Elected	1,080,175	125	.0115
West Windsor Township, ...	"	987,659	125	.0127
Washington Township, ...	"	673,163		
Hopewell Borough, ...	"	639,912	100	.0156
East Windsor Township, ...	"	626,690	120	.0191
Pennington Borough, ...	"	502,230	50	.010

Trenton City and Princeton Borough have maps.

MIDDLESEX COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Perth Amboy City, ...	App.	$16,901,948	3– $500 each.	.0088
New Brunswick, ...	"	11,916,824	3– 500 each.	.0126
Woodbridge Township, ...	Elected	4,015,997	900	.0224
Piscataway Township, ...	"	3,852,475	600	.0155
Roosevelt Borough, ...	"	3,224,087	600	.0186
South Amboy City, ...	App.	2,989,230	4– 100 each.	.0133
Sayreville Township, ...	Elected	1,780,758	350	.019
Metuchen Borough, ...	"	1,587,195	150	.0094
Raritan Township, ...	"	1,483,721	500	.0337
South River Borough, ...	"	1,469,066	250	.017
South Brunswick Township, .	"	1,379,722	300	.0217
Highland Park Borough, ...	"	1,346,044	100	.0074
Madison Township, ...	"	1,121,026	225	.02
Cranbury Township, ...	"	1,028,151	240	.0233
Milltown Borough, ...	"	917,448	100	.0109
Monroe Township, ...	"	882,700	300	.034
Dunellen Borough, ...	"	881,214	150	.0170
East Brunswick Township, ..	"	732,335	300	.041
Helmetta Borough, ...	"	714,058	75	.0105
North Brunswick Twp., ...	"	666,256	12c. per name.	
Jamesburg Borough, ...	"	620,007	140	.0225
Spotswood Borough, ...	"	278,234	50	.018

The following districts have maps: New Brunswick, Perth Amboy, South Amboy and Woodbridge.

MONMOUTH COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Long Branch City,	App.	$14,047,179	3– $550 each.	
Asbury Park City,	Elected	11,145,130	600 each.	
Neptune Township,	"	6,018,226	850	.0141
Deal Borough,	"	5,253,765		
Red Bank Borough,	"	4,996,408	800	.0160
Rumson Borough,	"	4,174,343	400	.00958
Middletown Township,	"	4,015,307		
Freehold Township,	"	3,900,935	700	.0179
Belmar Borough,	"	3,108,615	200	.006
Ocean Township,	"	2,710,679	300	.0110
Spring Lake Borough,	"	2,586,419	300	.0116
Shrewsbury Township,	"	2,511,448	600	.0239
Allenhurst Borough,	"	2,505,917	200	.008
Atlantic Highlands Bor.,	"	1,961,702	200	.0119
Bradley Beach Borough,	"	1,799,160	250	.0139
Sea Bright Borough,	"	1,683,679	250	.0148
Keyport,	"	1,577,124	500	.0317
Wall Township,	"	1,559,097	525	.0337
Upper Freehold Township,	"	1,434,590	300	.0209
West Long Branch Bor.,	"	1,253,743	250	.0199
Eatontown Township,	"	1,247,084	200	.0160
Monmouth Beach Borough,	"	1,233,494	200	.0162
Avon Borough,	"	1,124,416		
Marlboro Township,	"	1,120,347	225	.020
Howell Township,	"	1,049,993	350	.0333
Holmdel Township,	"	1,038,878	300	.0289
Atlantic Township,	"	928,993	200	.0215
Manalapan Township,	"	914,820	225	.0246
Millstone Township,	"	869,820	220	.0253
Matawan Borough,	"	859,472	250	.0291
Manasquan Borough,	"	800,703		
Highlands Borough,	"	651,202	125	.0190
Raritan Township,	"	639,418	200	.0312
Matawan Township,	"	584,049	200	.0342
Allentown Borough,	"	390,832	80	.0204
Neptune City Borough,	"	342,125	100	.0292
Englishtown Borough,	"	266,281	45	.0169
Farmingdale Borough,	"	161,323	40	.0248

The following districts have maps: Long Branch, Asbury Park and Keyport. The county has no map.

MORRIS COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Morristown Town,	App.	$11,132,248	$900	.008
Morris Township,	Elected	4,117,915	500	.0121
Dover Town,	App.	3,874,895	500	.0129
Madison Borough,	Elected	3,797,568	700	.0184
Hanover Township,	"	3,188,093	500	.0157
Boonton Town,	App.	2,603,945	500	.0192
Rockaway Township,	Elected	1,523,286	500	.0330
Roxbury Township,	"	1,156,745	300	.026
Passaic Township,	"	1,406,895	300	.0213
Florham Park Borough,	"	1,406,132	150	.0107
Chatham Borough,	"	1,276,227	200	.0157
Butler Borough,	"	1,058,478	250	.0236
Washington Township,	"	988,653	300	.0304
Wharton Borough,	"	960,784	200	.0208
Pequannock Township,	"	922,197	300	.0325
Rockaway Borough,	"	834,364	550	.066
Mendham Borough,	"	812,257	100	.0123
Jefferson Township,	"	792,232	200	.0252
Randolph Township,	"	790,245	200	.0253
Montville Township,	"	725,079	275	.0379
Chester Township,	"	695,206	155	.0223
Mt. Olive Township,	"	624,709	175	.0280
Chatham Township,	"	618,360	150	.0243
Mendham Township,	"	595,120	120	.0201
Mt. Arlington Borough,	"	542,015	200	.0368
Netcong,	"	402,809	75	.0186
Boonton Township,	"	204,909	60	.0298

The assessors do not have maps, nor has the county a map.

There is an atlas published containing maps of Morristown, Florham Park, Chatham, Mendham, and Madison Boroughs, and parts of Townships of Chatham, Hanover, Mendham and Passaic.

OCEAN COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Lakewood,	Elected	$6,098,841	$600	.010
Dover,	"	1,570,662	480	.0305
Point Pleasant,	"	1,396,578		
Brick Township,	"	840,144		
Bay Head Borough,	"	717,885	500	.069
Plumstead,	"	580,881	160	.0275
Sea Side Park,	"	553,455	150	.0271
Berkeley,	"	507,400		
Manchester,	"	500,064	175	.0350
Beach Haven Borough,	"	476,445	50	.0105
Tuckerton,	"	426,346	100	.023
Jackson,	"	417,760	175	.042
Long Beach,	"	411,645	150	.0364
Island Heights Borough,	"	405,250	150	.037
Union,	"	398,004	125	.0314
Stafford,	"	301,402	130	.0431
Lacey,	"	276,867	75	.027
Eagleswood,	"	166,965	65	.0389
Ocean,	"	151,354	50	.033
Lavellette Borough,	"	119,935	100	.083
Little Egg Harbor,	"	115,910		
Surf City,	"	79,361	75	.0945
Barnegat City,	"	77,356		
Harvey Cedars,	"	56,810	50	.088

PASSAIC COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Paterson,	App.	$98,065,630	5– $1,500 each.	.0076
Passaic,	"	35,546,586	5– 1,000 each.	.0141
Acquackanonk Township,	"	7,653,370	1,000	.013
Little Falls Township,	"	2,346,159	300	.0127
Wayne Township,	"	1,750,416	500	.0285
Pompton Township,	"	1,636,341	300	.0183
West Milford Township,	"	1,506,091	300	.0199
Totowa Borough,	"	1,480,420		
Hawthorne Borough,	"	1,447,591		
Haledon Borough,	"	1,257,960	300	.0238
Pompton Lakes Borough,	"	756,436	125	.0165
Prospect Park Borough,	"	739,870		
North Haledon Borough,	"	338,226		

The following taxing districts have maps of recent compilation: Totowa Borough, Pompton Lakes Borough, Acquackanonk Township and Hawthorne Borough.

SALEM COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
East Ward, Salem,	Elected	$2,165,902	$600	.036
Pilesgrove,	"	1,624,775	250	.015
West Ward, Salem,	"	1,483,090	525	.035
Mannington,	"	1,273,122	300	.024
Upper Pittsgrove,	"	1,255,733	225	.018
Woodstown Borough,	"	1,189,350	175	.015
Upper Penns Neck,	"	812,400	150	.019
Pennsgrove Borough,	"	793,937	130	.016
Alloway,	"	783,448	200	.026
Lower Alloway Creek,	"	764,134	110	.014
Pittsgrove,	"	742,796	300	.040
Lower Penns Neck,	"	716,262	145	.020
Oldmans,	"	693,797	160	.023
Quinton,	"	683,538	150	.022
Elmer Borough,	"	577,475	110	.019
Elsinboro,	"	312,561	75	.024

The assessors do not have maps, nor has the county a map.

SOMERSET COUNTY.

Taxing District.	*How Chosen.*	*1909 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Bernards,	Elected	$5,096,491	$600	.01177
North Plainfield Borough,	"	4,277,975	600	.0142
Somerville Borough,	"	3,876,602	500	.0128
Bridgewater,	"	2,954,102	500	.0169
Hillsborough,	"	2,314,248	375	.0162
Franklin,	"	2,187,081	250	.0114
Bound Brook Borough,	"	2,120,690	350	.0165
Bedminster,	"	1,852,000	300	.01627
Montgomery,	"	950,483	175	.0184
Branchburg,	"	839,643	135	.01607
So. Bound Brook Borough,	"	542,289	100	.0184
North Plainfield,	"	537,795	150	.0279
Warren,	"	515,050	125	.0242
Rocky Hill Borough,	"	240,277	60	.0250
Millstone Borough,	"	95,053	20	.021

The assessors do not have maps, nor has the county a map.

SUSSEX COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Hardyston Township,	Elected	$3,314,534	$500	.0151
Newton Town,	"	2,751,553	400	.0145
Wantage Township,	"	1,098,669	300	.0273
Sparta Township,	"	920,684	175	.0190
Vernon Township,	"	862,844	170	.0197
Sussex Borough,	"	794,700	65	.0082
Frankford Township,	"	678,871	115	.0169
Stanhope Borough,	"	441,678	60	.0136
Lafayette Township,	"	430,323	70	.0163
Green Township,	"	403,848	100	.0248
Andover Township,	"	402,183	50	.0124
Byram Township,	"	384,719	75	.0195
Stillwater Township,	"	360,220	70	.0194
Hopatcong Borough,	"	330,620	50	.0151
Branchville Borough,	"	329,621	50	.0152
Hampton Township,	"	319,210	50	.0157
Sandyston Township,	"	302,825	100	.0332
Fredon Township,	"	295,759	50	.0167
Andover Borough,	"	277,336	40	.0144
Montague Township,	"	262,400	60	.0228
Walpack Township,	"	168,146	60	.0356

The assessors do not have maps, nor has the county a map.

UNION COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Elizabeth City,	Elected	$55,036,902 90	12– $400 each.	
Plainfield City,	App.	24,222,130 00	4– 400 each.	.0066
Summit City,	Elected	9,865,660 00	2– 450 each.	.0091
Linden Township,	Elected	7,799,675 00	1,000	.0128
Westfield Town,	2 App. 1 elected	7,027,820 00	3– 400 each. 400 clerk.	.0227
Rahway City,	3 App. 2 Elected	6,569,972 42	4– 400 each. 1– 450 clerk.	.0358
Cranford Township,	Elected	5,305,525 00	600	.0113
Roselle Borough,	"	3,020,040 00	250	.00827
Union Township,	"	2,933,650 85	650	.0222
Roselle Park,	"	2,744,116 00	400	.0146
Fanwood Township,	"	1,324,815 00	275	.0208
Garwood Borough,	"	1,185,417 00	150	.0127
Springfield Township,	"	1,027,067 00	200	.0195
Linden Borough,	"	998,075 00	350	.035
Clark Township,	"	759,161 00	Commission on ratables.	
Kenilworth Borough,	"	756,235 00	125	.0165
New Providence Borough,	"	516,160 00	100	.0194
Fanwood Borough,	"	493,700 00	60	.0122
Mountainside Borough,	"	479,500 00	75	.0156
New Providence Township,	"	368,488 50	90	.0244

The following districts have maps: Cranford, Elizabeth, Fanwood, Garwood, Plainfield, Rahway, Roselle Borough, Roselle Park and Westfield. The county has an atlas.

WARREN COUNTY.

Taxing District.	*How Chosen.*	*1910 Net Valuation.*	*Salary of Assessor.*	*% of Ratables.*
Phillipsburg,	Elected	$6,467,057	6– $200 each.	.0185
Pohatcong,	"	2,014,773	300	.0149
Washington Borough,	"	1,862,084	300	.0161
Hackettstown,	"	1,679,880	150	.0089
Belvidere,	"	1,517,792	300	.0198
Oxford,	"	1,350,441	300	.0222
Franklin,	"	1,312,517	120	.0091
Washington Township,	"	990,267	150	.0151
Blairstown,	"	926,671	150	.0162
Knowlton,	"	788,752	150	.01905
Mansfield,	"	746,982	175	.02342
Hope,	"	665,497	150	.0225
Harmony,	"	650,117	185	.0284
Greenwich,	"	642,833	130	.0211
Frelinghuysen,	"	570,564	100	.0174
Allamuchy,	"	505,078	100	.0198
Lopatcong,	"	492,040	85	.01728
Independence,	"	463,373	110	.0238
Hardwick,	"	192,578	60	.0312
Pahaquarry,	"	135,037	40	.0296

No county map. Phillipsburg only has a map, not a very good one.

STATEMENT OF INTERLOCKING PLANTS AND SUMMARY OF BLOCK SIGNALING, STATE OF NEW JERSEY.

INTERLOCKING PLANTS IN THE STATE OF NEW JERSEY.
SUMMARIZED REPORT OF PLANTS AT CROSSINGS, JUNCTIONS AND DRAW BRIDGES.

Location.	*Railroad Co's Interested.*	*Date Put in Service.*	*Kind of Machine.*	*Active Levers.*	*Remarks.*
"A" Dock, Perth Amboy,	L. V. R. R. (P. A. Brch.),			12	
Andover Junction,	L. & H. & Sussex R. R.,			4	
Arthur Kill Draw,	S. I. R. T. Ry.,			..	
Atl. Highlands Pier,	F. & A. H. R. R. Co.,		S. & F. Mech.,	27	
" City, Baltic Ave.,	W. J. & S. S. R. R. & A. C. R. R., Baltic Ave. Br.,	1886	" "	32	
" " Chelsea Ave.,	W. J. & S. S. R. R. & A. C. R. R.,	1889	" "	12	
" Draw Bridge,	W. J. & S. S. R. R. Co., Camden to Atl. Cty.,	1895	" "	20	
" " "	A. C. R. R.,		" "	8	
" " "	W. J. & S. S. R. R. (Elec. line),	1906	" "	8	
" City Terminal,	W. J. & S. S. R. R.,	1899	" "	48	
Augusta Junction,	L. & N. E. & Sussex R. R.			..	
"B" Dock,		1891	Nat. "	13	
Barnegat Pier,	Phila. & L. B. R. R.,			..	Grd. Levers
Belle Mead,	Del. & B. B. R. R.,	1900	Std. "	8	
Bergen Jct.,	Penh'n Creek & Northern R. R. of N. J.,	1910	Pneu.,	19	
Bermingham,	Cam. & Bur. Co. R. R.,	1910	S. & F. Mech.,	8	
Bordentown,	U. N. J. R. R. & C. Co. (B. Brch.),	1904	" "	4	
Bound Brook Junction,	C. R. R. of N. J. & D. & B. B. R. R.,	1904	P. S. Co. "	37	
Branch Port,	N. Y. & L. B & N. J. S. Ry. Co.,	1903	S. & F. "	33	
Bridgeton Crossing,	W. J. & S. S. R. R. & N. J. S. Ry. Co.,	1871	" "	4	
Brills Junction,	C. R. R. of N. J.,	1900	Johnson "	24	
Broadway,	"	1904	S. & F. "	12	
Broadway, Paterson,	N. Y., S. & W. & Pub. Ser. Corporation,	1908	Federal All. Elec.,	11	
Branchville,	N. Y., S. & W. & D., L. & W. R. R.,	1909	S. & F. Mech.,	4	
Bloomfield Avenue,	Watchung R. R. & Pub. Service Corp.,	1893	Standard,	11	
Boonton,	D., L. & W. R. R.,	1907	Johnson Standard,	20	
Bulson Street,	W. J. & S. S. & A. C. R. R.,	1888	S. & F. Mech.,	16	
Brunswick Ave., J. C.,	U. N. J. R. R. & C. Co. & J. Jct. Ry. Co.,	1891	Pneu. power,	12	

Location.	*Railroad Co's Interested.*	*Date Put in Service.*	*Kind of Machine.*	*Active Levers.*	*Remarks.*
Burleigh,	W. J. & S. S. R. R. & A. C. R. R.,	1894	S. & F. Mech.,	20	
Burlington East,	U. N. J. R. R. & C. Co., & Cam. & Bur. Co. R. R.,	1907	" "	11	
Burlington,	U. N. J. R. R. & C. Co.,	1907	" "	7	
Cabin "N" Harrison,	U. N. J. R. R. & C. Co.,	1910	Pneu. Power,	60	
" "S" "	" & P. T. & T. Co.,	1910	" "	58	
" "W' Hack. Riv. Dw.,	P. T. & T. Co.,	1910	" "	11	
Caisson No. 1,	H. & M. R. R. Co.,	1907	Elec. "	24	
" No. 2,	"	1907	" "	12	
" No. 3,	"	1909	Pneu. "	20	
Camden Ter. Elec. R. R.,	W. J. & S. S. Ter. Branch,	1906	S. & F. Mech.,	20	
Cass Street,	U. N. J. R. R. & C. Co. (Bor. Brch.),	1909	" "	12	
Centre Street Draw,	"	1909	" "	2	
Chester Junction,	Morris & Essex R. R.,	1902	Johnson "	24	
Clinton St., Trenton,	U. N. J. R. R. & C. Co.,	1893	Pneu. Power,	6	
Claremont,	C. R. R. of N. J.,		S. & F. Mech.,	28	This plant has been discontinued
Coalburg Junction,	N. Y., S. & W. & Bergen Co. R. R.,	1889	Std. "	20	
Communipaw Avenue,	Nat. Docks Ry.,	1895	Nat. "	31	
Constable Junction,	Nat. Docks Ry. & L. V. R. R.,	1895	" "	32	
Coopers Creek, E. End,	U. N. J. R. R. & C. Co.,	1906	S. & F. Mech.,	10	
" " W. "	"	1909	" "	16	
Corson's Inlet Draw,	Atl. City R. R. Co.,				No information re dates.
" " "	W. J. & S. S. R. R.,	1909	S. & F. Mech.,	6	
Cranford Junction,	C. R. R. of N. J. & B. & N. Y. R. R.,	1906	Pneu. Power,	29	
Crook Horn Draw,	Atl. City R. R. Co.,				No information re dates.

Location.	Railroad Co's Interested.	Date Put in Service.	Kind of Machine.	Active Levers.	Remarks.
Delair Junct. East,	Del. R. R. R. & Bridge Co. & U. N. J. R. R. & C. Co.,	1898	S. & F. Mech.,	11	
Delaware River Bridge,	Del. R. R. & Bdg. Co.,	1907	" "	4	
Del. & Raritan Cnl. Brdg.,	B. D. R. R. Co.,			4	
Denville, E. End,	Morris & Essex R. R.,	1903	Johnson Mech.,	24	
" W. "	"	1903	S. & F. Mech.,	26	
Dover,	"	1903	S. & F. Mech.,	29	
Dover Draw,	"	1903	S. & F. Mech.,	12	
Dundee Junction,	Bergen Co. R. R.,	1901	Johnson Mech.,	10	
Dunellen,	C. R. R. of N. J.,	1904	S. & F. Mech.,	38	
E. End, Del. Riv. Bridge,	D. R. B. & U. N. J. R. R. & C. Co.,	1898	" "	14	
East End Freight Yard,	U. N. J. R. R. & C. Co.,	1890	" "	27	
" " Oak Island Jct.,	C. R. R. of N. J. & L. V. & N. Y. Bay R. R.,	1903	" "	44	
" " Port Morris Yd.,	Morris & Essex R. R.,	1900	" "	23	
East Dover Junction,	D. & R. & M. & E. R. R.,	1903	" "	13	
" End of tunnel,	Long Dock Co.,				
" Orange, 15th St.,	Morris & Essex R. R.,	1900	Stevens "	6	
" End Wash. Yard,	"	1903	S. & F. "	28	
" Patt. Junct.,	M. & E. Boonton Br.,	1902	Johnson "	18	
" End, Secacus Yd.,	" " "	1904	" "	34	
E. & A. Crossing,	C. R. R. of N. J., L. V. R. R. Co.,	1901	Std. "	26	
Edgewater,	N. Y., S. & W. R. R.,	1893	S. & F. "	15	
Eliz. Creek Dw. E. End,	C. R. R. of N. J.,		Dwarf "	6	
" " " W. "	"		Std. "	14	
Elizabethport, Cabin No. 1,	"	1888	S. & F. "	36	
" " No. 2,	"	1888	" "	24	
Electric Dw. Atl. City,	W. J. & S. S. Elec. line,	1906	" "	15	
Ewing, East End,	D. & B. B. R. R. Co.,	1900	Std. "	9	
" West "	"	1900	Std. "	9	

Location.	*Railroad Co's Interested.*	*Date Put in Service.*	*Kind of Machine.*	*Active Levers.*	*Remarks.*
Fairmont Avenue,	N. Y. & N. J. R. R.,	1907	Fed. Elec.,	9	
Farmingdale,	F. & J. A. R. R.,	1910	Elec. Mech.,	14	
Fish House Jct.,	U. N. J. R. R. & C. Co. & D. R. B. Co.,	1904	S. & F. Mech.,	14	
Ferremont Junction,	Chester R. R. Co. & C. R. R.,	1909	Dwf. "	5	
Forest Hill;	N. Y. & G. L. Ry. Co.,	1897	Std. "	32	
Franklin Furnace Junct.,	L. & H. R. Ry. & N. Y., S. & W. R. R.			..	
Franklin Furnace,	Sussex R. R. &N. Y., S. & W. R. R.,	1908	Grd. Mech.,	8	
Glassboro,	W. J. & S. S. R. R.,	1906	Pneu. Power,	29	
Glassboro, South,	A. C. R. R. & W. J. & S. S. R. R.,	1888	S. & F. Mech.,	28	
Glenmore, East,	D. & B. B. R. R.,	1900	Std. "	9	
" West,	"	1908	" "	9	
Gloucester Junction,	A. C. R. R.,	1908	S. & F. "	16	
Granton "	N. Y., S. & W. R. R. & N. R. R. of N. J.,	1889	Std. "	30	
Granton,	West Shore R. R.,		" "	24	
Grassy Sound Draw,	W. J. & S. S. R. R.,	1909	S. & F. "	6	
Great Notch,	N Y. & G. W. L. Ry. Co.,		Std. "	32	
Greens Bridge,	L. Valley R. R. Co.,	1898	S. & F. "	10	
Grove Street,	L. Dock Co.,	1910	Pneu. Power,	36	
" "	H. & M. R. R. Co.,	1908	" "	18	
" "	Morris & Essex,	1908	" "	41	
Hackensack Draw,	Newark & H. R. R. Co.,	1908	Taylor.		
			Elec. Power,	28	
" "	P. T. & T. Co.,	1910	Pneu. "	11	
" Pass. "	U. N. J. R. R. & C. Co.,	1894	Dwf. Mech.,	5	
Hackensack " Fre. Line,	"		Grd. Levers.		
" Draw,	P. & H. R. R. R.,	1897	Std. Mech.,	31	
" " E. End,	C. R. R. of N. J.,		Dwf. "	5	
" " W. "	"		" "	5	
Hainsport "	C. & B. Co. R. R.,		Grd. Levers.		
Hamilton, East End,	D. & B. B. R. R. Co.,	1900	Std. Mech.,	9	

Location.	Railroad Co's Interested.	Date Put in Service.	Kind of Machine.	Active Levers.	Remarks.
Hamilton, West End,	D. & B. B. R. R. Co.,	1900	Std. Mech.,	9	
Harrison,	U. N. J. R. R. & C. Co.,	1909	S. & F. Mech.,	10	
"	Morris & Essex R. R.,	1903	" "	23	
Henderson Street,	H. & M. R. R. Co.,	1909	Pneu. Power,	32	
" "	U. N. J. R. R. & C. Co.,		" "	24	
Highland Avenue,	Morris & Essex R. R.,	1902	John. Mech.,	12	
Hoboken Ter.,	H. & M. R. R. Co.,	1907	Elec. Power,	17	
" "	Morris & Essex R. R.,	1907	Pneu. "	113	
" Rd. House,	"		S. & F. Mech.,	25	
" Fre. Yd. Entrance,	"	1910	Pneu. Power,	18	
Jamesburg Junction,	U. N. J. R. R. & C. Co. & F. J. A. R. R.,	1902	S. & F. Mech.,	34	
Jersey City Ter.,	Long Dock R. R.,	1910	Pneu. Power,	70	
Jersey Avenue,	"	1900	Std. Mech.,	15	
Jersey Ter. Cabin No. 1,	C. R. R. of N. J.,	1898	" "	79	
" " " No. 2,	"	1896	" "	53	
" City Junct.,	"		Nat. "	15	
Kearney Junction,	Morris & Essex R. R.,	1910	John. "	19	
Kaighn's Pt. Ter.,	A. C. R. R.,		Std. "	51	
Lafayette Street,	U. N. J. R. R. & C. Co.,	1904	S. & F. Mech.,	14	
Lake Junction,	C. R. R. of N. J. & Hopatcong R.,	1909	Dwf. "	5	
Lansdown,	Lehigh Valley,	1899	Std. "	21	
Lehigh & Hudson Junct.,	B. & D. R. R. R. & L. & H. R. R. R.,	1906	S. & F. "	12	
Little Falls,	N. Y. & G. W. L. Ry. Co.,		Std. "	32	
" "	M. & E. R. R. Boonton Br.,	1908	John. "	15	
Little Ferry Draw,	N. Y., S. & W. R. R.,	1909	S. & F. Mech.,	8	
" " "	W. S. R. R.,		" "	4	
" " Junct.,	N. Y., S. & W. R. R.,	1893	" "	15	
Lincoln Park,	M. & E. R. R. (Boonton Br.),	1907	John. "	22	
Long Branch Junction,	P. A. & W. & C. R. R. of N. J.,	1896	S. & F. "	8	

Location.	Railroad Co's Interested.	Date Put in Service.	Kind of Machine.	Active Levers.	Remarks.
Lower Hackensack Draw,	M. & E. R. R.,	1902	S. & F. Mech.,	9	
Ludlam's Thoroughfare Dw.,	W. J. & S. S. R. R.,	1909	" "	6	
Main St., Hackensack,	N. Y., S. & W. & P. S. Corp.,	1908	Fed. Elec.,	11	
Manasquan Draw,	N. Y. & L. B. Ry. Co.,	1903	S. & F. Mech.,	8	
Manumuskin,	W. J. & S. S. R. R.,	1904	Stevns. "	11	
Mantua Creek Draw,	"	1909	S. & F. Mech.,	6	
Manunka Chunk,	Warren R. R. & B. & D. R. R. R.,	1903	" "	21	
Matawan,	N. Y. & L. B. R. R.,	1903	" "	45	
Marion Junction,	U. N. J. R. R. & C. Co. & N. Y., S. & W. R. R.,	1903	" "	16	
Meadow's Crossing,	W. J. & S. S. R. R. & A. C. R. R.,	1886	" "	22	
Merchantville Junct.,	D. R. R. & B. Co. & W. J. & S. S. R. R.,	1897	" "	8	
Metuchen,	U. N. J. R. R. & C. Co. & L. V. R. R.,	1884	" "	27	
Middle Yard,	U. N. J. R. R. & C. Co.,	1903	" "	22	
Midland Bridge,	L. D. Co. & N. R. R. of N. J.,	1905	" "	18	
Millburn,	Morris & Essex R. R.,	1902	" "	29	
Millham Junction,	U. N. J. R. R. & C. Co.,	1889	" "	27	
Millstone "	"	1900	" "	27	
Minatola,	W. J. & S. S. R. R. & N. J. S. Ry.,	1880	" "	20	
Monmouth Junction,	U. N. J. R. R. & C. Co. & F. H. & J. A. R. R.,	1889	" "	40	
Mountain View,	M. & E. R. R. & N. Y. & G. L. Ry.,	1903	" "	33	
Morgan Dw., E. End,	N. Y. & L. B. R. R.,	1903	" "	9	
" " W. "	"	1903	" "	5	
Morris Junction,	U. N. J. R. R. & C. Co.,	1901	" "	17	
Morristown Pass. Yd.,	M. & E. R. R.,	1900	" "	28	
Musconetcong Tun. E. End,	Lehigh Valley R. R.,	1895	Nat. "	14	
" " W. "	"	1898	" "	10	
National Storage Jct.,	N. D. Ry. & C. R. R. of N. J.,	1895	" "	18	
Newark,	Morris & Essex R. R.,	1903	S. & F. "	12	
Newark Avenue,	U. N. J. R. R. & C. Co.,	1891	Pneu. Power,	17	

Location.	Railroad Co's Interested.	Date Put in Service.	Kind of Machine.	Active Levers.	Remarks.
Newark Bay Draw,	L. V. R. R. Co. & N. B. R. R.,	1904	Taylor, all electric,	16	
" " "	C. R. R. of N. J.,		Pneu. Power,	13	
" Cabin,	"		S. & F. Mech.,	34	
" Draw,	N. & H. R. R.,		S. & F. Mech.,	10	
New Durham,	West Shore R. R.,	1907	Fed. "	32	
Newfield,	W. J. & S. S. R. R.,	1880	Pneu. Power,	17	
Newark Junction,	C. R. R. of N. J.,	1903	Wharton Mech.,	7	
" "	P. & H. R. R. & N. & H. R. R.,	1905	John. "	20	
New York & N. J. Jct.,	N. J. & N. Y. R. R. & P. & H. R. R. R.,	1899	Std. Mech.,	23	
North of Gloucester,	W. J. & S. S. R. R. & A. C. R. R.,	1875	S. & F. Mech.,	16	
Oak Island Junct.,	C. R. R. of N. J., L. V. R. R. & N. Y. B. R. R.,	1903	" "	44	
Ocean City,	A. C. R. R.,	1902	" "	7	
Ocean Port Dw. E. End,	N. Y. & L. B. R. R.,	1903	" "	5	
" " " W. "	"	1903	" "	5	
Oil Yard Crossing,	N. D. Ry. & C. R. R. of N. J.,	1895	Dwf. "	2	
Old Man's Draw,	W. J. & S. S. R. R.,	1909	S. & F. "	6	
Oxford Tun., E. End,	Warren R. R.,	1904	" "	3	
" " W. "	"	1904	" "	3	
Park View,	L. V. R. R. Co.,	1893	Nat. "	25	
Passaic Bridge,	Pat. & Hud. Riv. R. R.,	1892	S. & F. "	7	
Pass. Connection,	U. N. J. R. R. & C. Co.,	1902	Pneu. Power,	15	
Passaic,	M. & E. R. R. (Boonton Br.),	1908	S. & F. Mech.,	19	
" River Draw,	N. Y. B. R. R.,	1902	Stevens "	2	
" " Dw. E. End,	C. R. R. of N. J.,	1908	Dwf. Mech.,	5	
" " " W. "	"	1908	" "	5	
" Draw,	Morris & Essex R. R.,	1903	S. & F. Mech.,	17	
Pavonia Junction,	U. N. J. R. R. & C. Co. & C. & B. Co. R. R.,	1899	" "	17	
Penn. Sta. J. C.,	H. & M. R. R.,	1909	Pneu. Power,	14	

Location.	*Railroad Co's Interested.*	*Date Put in Service.*	*Kind of Machine.*	*Active Levers.*	*Remarks.*
Perth Amboy Junct.,	U. N. J. R. R. & C. Co. & P. A. & W. R. R.,	1891	S. & F. Power,	47	
Phillipsburg,	C. R. R., L. V., M. & E. & B. & O. R. R.,		" Mech.,	11	
"	B. & D. R. R.,	1890	John. "	15	
"	L. V. R. R., C. R. R. & B. & D. R. R.,	1902	Taylor Elec.,	49	
Pine St., Camden,	W. J. & S. S. R. R.,	1907	Pneu. Power,	7	
Pompton Junction,	N. Y. & G. L. R. R. Co. & N. Y., S. & W. R. R.,	1905	Nat. Mech.,	32	
Port Reading,	C. R. R. of N. J.,	1904	S. & F. Mech.,	12	
P. R. R. Crossing,	P. A. & W. R. R. & L. V. R. R.,	1897	Dwf. "	4	
Plainfield,	C. R. R. of N. J.,	1907	Pneu. Power,	24	
Pleasantville,	W. J. & S. S. R. R. & A C. & S. R. R.,	1906	S. & F. Mech.,	16	
Port Ave., Elizabeth,	C. R. R. of N. J.,	1900	Wharton Mech.,	4	
Port Morris, E. End,	M. & E. R. R.,	1900	S. & F. Mech.,	23	
" " W. "	"	1902	" "	37	
Princeton Junction,	U. N. J. R. R. & C. Co.,	1900	" "	22	
" Draw,	"	1908	" "	4	
Racoon Creek Draw,	W. J. & S. S. R. R.,	1909	" "	6	
Rahway Dw., E. End,	C. R. R. of N. J.,	1905	Dwf. "	5	
" " W. "	"	1905	" "	5	
Rahway Draw,	"	1905	" "	2	
Ramsey,	P. & R. R.,	1901	John. "	17	
Rancoca's Creek Dw.,	U. N. J. R. R. & C. Co.,	1909	S. & F. Mech.,	8	
Raritan River Draw,	N. Y. & L. B. Ry. Co.,	1908	" "	4	
Red Bank,	"	1903	" "	52	
Ridgewood Junction,	P. & R. R. R. & B. CO. R. R.,	1903	Taylor, all elec. power,	45	
Riverside, Paterson,	N. Y., S. & W. R. R. & P. S. Corp.,	1907	S. & F. Mech.,	11	
Roselle Tower,	C. R. R. of N. J.,		" "		Revised 1910.
Roseville Avenue,	M. & E. R. R.,	1905	John. Mech.,	47	

Location.	Railroad Co's Interested.	Date Put in Service.	Kind of Machine.	Active Levers.	Remarks.
Rutherford Junction,	P. & H. R. R. R. & B. CO. R. R.,	1897	Std. Mech.,	35	
Sea Isle Junction,	W. J. & S. S. R. R.,	1908	S. & F. "	36	
Sea Girt,	J. Y. & L. B. Ry. Co. & F. & J. A. R. R.,	1883	" "	20	
Secaucus Yd. E. End,	M. & E. R. R. (Boonton Br.),	1904	John. "	34	
" " W. "	" " "	1901	" "	44	
Second St., Camden,	U. N. J. R. R. & C. Co.,	1907	S. & F. Mech.,	19	
Shanley's Cut,	"	1903	Pneu. "	16	
Ship Yard Siding,	W. J. & S. S. R. R.,	1899	S. & F. "	6	
Shrewsbury Dw. E. End,	N. R. R. Co.,		Stevns. "	5	
" " W. "	"		" "	4	
Singers Cabin,	C. R. R. of N. J.,		S. & F. Mech.,	8	
Somerville,	"	1903	" "	26	
South Amboy,	N. Y. & L. B. R. R. Co.,	1908	" "	11	
" "	U. N. J. R. R. & C. Co.,	1903	" "	17	
South Elizabeth,	"	1892	" "	15	
South Glassboro,	W. J. & S. S. R. R. & N. J. S. Ry.,	1888	" "	28	
" of Monmouth Jct.,	F. & J. A. R. R.,	1910	" "	6	
" Orange,	Morris & Essex R. R.,	1900	" "	37	
" Paterson,	P. N. & N. Y.,	1897	Stevns. "	8	
" Plainfield,	L. V. R. R.,	1901	Nat. Mech.,	56	
South River Draw,	Raritan R. R. R.,				
South Somerville,	L. V. R. R.,	1896	Std. "	13	
Sound Shore Draw,	S. S. R. R.,				
Sparta,	L. & H. & N. Y., S. & W. R. R.,		S. & F. Mech.,	4	
Spring St., Elizabeth,	C. R. R. of N. J.,	1897	" "	25	
Sussex Junction,	N. Y., S. & W. R. R. & L. & N. E. R. R.,	1909	" "	5	
Stanton,	L. V. R. R.,	1906	L.V.R.R. "	4	
State St., Hackensack,	N. Y., S. & W. R. R.,	1907	Std. "	6	
Summit, East End,	Morris & Essex R. R.,	1904	John. "	29	
" West "	"	1904	" "	24	
Sussex Draw,	Sussex R. R.,	1905	S. & F. "	7	

Location.	Railroad Co's Interested.	Date Put in Service.	Kind of Machine.	Active Levers.	Remarks.
Tenth St., Camden,	U. N. J. R. R. & C. Co.,	1900	Pneu. Power,	27	Grd. Levers
Toms River Draw,	P. & L. B. R. R.,			..	
Trenton Junction,	D. & B. B. R. R. Co.,		John. Mech.,	29	
Tuckahoe Draw,	A. C. R. R.,	1906	S. & F. Mech.,	6	
" Jct.,	"	1906	Std. "	23	
Upper Hackensack Draw,	M. & E. R. R. (Boonton Br.),	1901	S. & F. Mech.,	9	
Van Hook St., Camden,	W. J. & S. S. R. R.,	1893	Pneu. power,	11	
Vineland Cabin,	W. J. & S. S. R. R. & V. R. R.,	1871	Whar. Mech.,	4	
Waldwick Junction,	Pat. & R. R. R.,	1903	Taylor, all elec. power,	39	
Waretown,	P. & L. B. & T. R. & B. R. R.,	1908	S. & F. Mech.,	4	
Washington St., J. C.,	U. N. J. R. R. & C. Co.,	1891	Pneu power,	22	
" " Junct.,	H. & M. R. R.,	1909	" "	13	
" " Mt. Holly,	C. & B. C. R. R. (Mt. Holly Br.),			..	
Waverly & Passaic Jct.,	U. N. J. R. R. & C. Co.,	1902	Pneu. power,	52	
Washington Yd. W. End,	W. R. R.,	1903	John. Mech.,	28	
West Arlington,	N. Y. & G. L. Ry.,	1897	Std. "	12	
West End,	N. Y. & L. B. R. R. & W. E. R. R.,	1903	S. & F. "	37	
" " of Bgn. tunnel,	Morris & Essex R. R.,	1909	Pneu. power,	53	
" " " tunnel,	N. Y., S. & W. R. R.,		Mech.,	2	
Westfield Avenue,	C. & B. Co. R. R. & P. S. Corp.,	1904	S. & F. Mech.,	5	
Westfield,	C. R. R. of N. J.,	1906	" "	35	
West Haddonfield.	W. J. & S. S. R. R. & D. R. R. & B. Co,	1907	" "	15	
West 8th St., Bayonne,	C. R. R. of N. J.,		Pneu. power,	15	
" Newark Junction,	L. V. R. R. & U. N. J. R. R. & C. Co.,	1904	S. & F. Mech.,	50	
Westville,	W. J. & S. S. R. R.,	1906	" "	14	
Weehawken,	W. S. R. R.,	1909	Std. "	44	
Winslow Junction,	A. C. R. R.,	1908	John. "	42	
" "	W. J. & S. S. R. R.,	1906	S. & F. "	9	

Location.	Railroad Co's Interested.	Date Put in Service.	Kind of Machine.	Active Levers.	Remarks.
Winslow Jct. Brick Yd. Sid.,	W. J. & S. S. R. R. & A. C. R. R.,		Stevns.	4	
Williamstown Junction,	A. C. R. R.,	1890	S. & F. Mech.,	13	
Willow Ave., Hoboken,	N. J. J. R. R. & W. S. R. R.,	1906	Std. "	22	
" St. Draw,	B. D. R. R.,			..	Grd. Levers
" " Trolley Crossing,	B. D. R. R. & P. S. Corp.,	1904	S. & F. "	20	
Wharton Furnace Derail,	D. & R. R. R.,		Stevns. "	3	
Wharton Yard,	"			..	
Whitings,	P. & L. B. R. R. & N. J. S. R. R.,	1910	Elec. Mech.,	22	
Woodbridge Dw. E. End,	C. R. R. of N. J.,		Dwf. "	8	
" " W. "	"		" "	5	
Woodbury, Ger. St.,	W. J. & S. S. R. R.,	1901	S. & F. "	40	
				5346	

SUMMARIZED REPORT OF AUTOMATIC SIGNALING OF VARIOUS RAILROADS AND THEIR BRANCHES.

Railroad.	*Type of Signals.*	*No. of Signals.*	*Remarks.*
C. R. R. of N. J.—			
Main Line,	U. S. & S. Co.'s pneu. and motor operated,	522	Jersey City to Phillipsburg.
Newark & N. Y. Branch,	Hall, Gas,	29	Newark to Communipaw Ave., J. C.
Elizabethport & P. A. Br.,	" Motor,	58	Elizabethport to Perth Amboy.
Newark to Elizabethport Branch,	U. S. & S. Co.,s Motor Oper.,	24	Brills Jct., N. & N. Y. Br., to Elizabeth Pt.
Navesink R. R. Co.,	" " "	9	Atl. Highlands to connection with N.J.S.R.R.
N. J. S. R. R. Co.,	" " "	55	From Highland Sta. to N. Y. & L. B. R. R.
D. L. & W. R. R.—			
Morris & Essex R. R.,	U. S. & S. Co.'s Pneu. and Motor Oper.,	361	From Hoboken to Washington.
Boonton Branch,	U. S. & S. Co.'s Motor Oper.,	144	From W. End Bergen Tunnel to East Dover Jct.
Newark & Bloomfield Br.,	" " "	20	From Roseville Ave. to Montclair.
Passaic & Del. R. R. Co.,	" " "	62	Fm. Summit Jct. to Bernardsville.
Passaic & Del. Ext. R. R.,	" " "	30	Fm. Bernardsville to Gladstone.
Sussex R. R. Co.,	" " "	39	Fm. Stanhope to Andover.
Warren R. R. Co.,	" " "	58	Fm. Wash. Jct. W. to State Line.
Erie R. R. System—			
Bergen Co. R. R.,	Hall, Motor operated,	32	Fm. Rutherford Jct. to Ridgewood Jct.
N. J. & N. Y. R. R.,	" " "	41	Fm. N. Y. & N. J. Jct. to Hackensack.
Pat. & Hud. R. R. R.,	" " "	60	Fm. Conn. with Pen Horn Creek R. R. W. to conn. with P. & R. R. R.
Pat. & Ramapo R. R.,	" " "	95	Fm. Conn. with P. & H. R. R. R. W. to State line.
Pen Horn Creek R. R.,	Hall, Motor operated, and U. S. & S. Co.'s pneu.,	62	Fm. a conn. with the L. D. Co. W. to a conn. with P. & H. R. R. R.
Hud. & Manhattan R. R.,	G. Ry. Sig. & U. S. & S. Co.'s light type,	193	In New Jersey.

Railroad.	*Type of Signals.*	*No. of Signals.*	*Remarks.*
L. V. R. R., Main Line, ...	Hall Disc. & Motor op., ...	289	Jersey C. to Phillipsburg.
Perth Amboy Branch, ...	Hall Top post, motor, ...	14	So. Plainfield to Perth A.
N. Y. & L. B. R. R. Co., ...	U. S. & S. Co.,s motor oper., ...	104	P. A. to Pt. Pleasant.
Pennsylvania R. R.—			
Del. R. R. & Bridge Co., ...	U. S. & S. Co.'s Pneu., ...	16	Fm. D. R. R. Brdg. to W. Haddonfield.
P. T. & T. Co., ...	" "	50	Fm. conn. with U. N. J. R. R. & C. Co. East to State line.
Perth Amboy & W. R. R.	" motor oper., ...	24	Fm. P. A. Jct. to Woodbridge Jct.
U. N. J. R. R. & C. Co., Main Line,	" Pneu., ...	475	Fm. J. C. W. to State Line.
Camden to Amboy, ...	" "	1	Bet. 10th St. Camden & Cam. Ter.
Phila. & Reading Ry. System—			
A. C. R. R., Main line, ...	Hall, Disc, ...	115	Camden to Atlantic City.
Sea Isle City Branch, ...	" "	51	Winslow Jct. to Tuckahoe Jct.
Cape May Branch, ...	" "	10	Tuckahoe Jct. to Woodbine Jct.
Del. & B. B. R. R., ...	" "	103	Bound B. Jct. to State Line.
Trenton Br., ...	" "	7	Trenton Jct. to Trenton.
West Shore R. R., ...	U. S. & S. Co.'s Motor, ...	69	From North of Weehawken to State Line.
		3222	

SUGGESTED AMENDMENTS TO RAILROAD TAX LAW.

SUGGESTED AMENDMENTS TO RAILROAD TAX LAW.

MAIN STEM, FIRST-CLASS.

The main stem shall include the permanent way or road-bed (excepting at terminals) not exceeding one hundred feet in width, measured horizontally at the elevation of the base of the rail, and fifty feet each way from the centre line, including all subconstruction or superconstruction necessary to provide a roadway of one hundred feet in width, meaning thereby the full embankment or excavated area, with slopes, slope ditches and berms, retaining walls or foundtations necessary to provide a width not to exceed one hundred feet at base of rail, together with all tracks, appurtenances, ballast and structures erected thereon and used in connection therewith, together with the land covered or included in same, all land owned within a strip not exceeding fifty feet either side of the centre line of the main stem (which shall be included in main stem); also, all signaling and interlocking plants, whether such signaling and interlocking plants be located entirely within the one-hundred-foot strip or otherwise, *not including*, however, any passenger or freight buildings, wherever located. (The main stem through all terminals shall not include any embankment slopes, walls, culverts, land or structures outside of the strip one hundred feet in width, measured horizontally at base of rail. Any building standing partly beyond the boundary line of main stem shall not be included in main stem.)

Also, all tangible, personal property, including the rolling stock, such as cars, locomotives, work equipment; the floating or marine equipment, such as ferry boats, tugs, lighters, derricks, floats, barges, and the like; the machinery, shafting and belting, engines, pumps, fire equipment, machine tools (exclusive of foundations), motors, hand tools, tools, jigs and dies, patterns and drawings, fuel, supplies of every kind whatsoever; and all other tangible, personal property of any railroad, railway or canal company; all telegraph and telephone lines and appurtenances

used for railroad purposes, whether located entirely within the one-hundred-foot strip or not: the total value of all highway bridges or subways owned by the railroad, railway or canal company, crossing the main stem; all culverts, pipes or waterways, owned or used for railroad or canal purposes, through the road-bed, whether entirely within the one-hundred-foot strip or not, excepting at terminals; also, all rolling and floating equipment *not* belonging to such railroad, railway or canal company but operated or used by the railroad, railway or canal company, or owned or operated by a private-car company, or others, within this state, or by a sleeping-car company, or other company; excepting locomotives or cars owned by persons or companies other than railroad, railway or canal companies, which are operated entirely within the switching limits of the property owned by said persons or companies. All floating equipment which has acquired a domicile or situs in this State shall be assessed in this State, at the total, true value of such equipment.

In case the rolling equipment is not located in this State the entire time, then, the valuation for the assessment of taxes shall be determined by the ratio which the car or engine miles run in this State during the year preceding the assessment bears to the total mileage run by such equipment during the same period; and, in case the car or engine mileage cannot be determined, then, the ratio of miles of all tracks owned or operated in the State to miles of all tracks owned or operated outside the State shall be used as the basis of apportionment of value to this State.

CENTRE OF MAIN STEM.

The *centre line* of the *main stem* shall be the filed centre line: and, where the filed centre line is not clearly indicated on the ground, or in case no centre line has been filed, then, the centre line will be determined as follows:

On *single track* roads, the center line is midway between the rails of the main running tracks; on *double-track* roads, midway between the two main running tracks; on *four-track* roads, midway between the inner rails of the inside running tracks; on *five-track* roads, the center of the middle track, etc.; excepting where it is apparent that the tracks are not located on the filed center

line, in which case, the center line of the continuous right-of-way strip shall be taken as the center line of main stem.

Passing tracks, spur tracks, sidings and the like are not to be defined as *running tracks,* and shall be classed as *second-class* property for such portions of same as lie outside of the boundaries of the main stem. Main Stem shall, also, include all values indicated and set forth in Subdivision IV, of Section 3, which reads as follows: "The value of the remaining property, including the franchise."

SECOND-CLASS PROPERTY.

Second-class property shall include all lands and real estate used for railroad, railway or canal purposes, including the permanent way or road-bed, track and its appurtenances, and all structures erected thereon, excepting as provided in main stem.

The term "Real Estate" includes the following items in place:

1. Ash-Handling Machinery.
2. Aerial Tramways.
3. Ballast.
4. Boilers.
5. Bridges.
6. Buildings.
7. Cables.
8. Canals.
9. Cattle Guards.
10. Chimneys.
11. Cisterns.
12. Conduits.
13. Coal-Handling Stations.
14. Conveyors.
15. Cross Gates.
16. Culverts.
17. Cupolas.
18. Dams.
19. Docks.
20. Electric Wiring.
21. Elevators.

22. Fencing.
23. Fixed Cranes.
24. Foundations.
25. Gas Piping and Fixtures.
26. Grain Elevators.
27. Heating Apparatus.
28. Hydrants
29. Incline Machinery—Canal.
30. Interlocking.
31. Lands used for Railroad Purposes.
32. Lighting Apparatus.
33. Locks and Operating Machinery.
34. Oiling System.
35. Piers.
36. Pipe Lines.
37. Pavements.
38. Planking or Guard Rails.
39. Reservoirs.
40. Riparian Rights.
41. Road-bed.
42. Road Crossing.
43. Sanitary Apparatus.
44. Sewers.
45. Shafting.
46. Shop Fixtures.
47. Shop Tracks.
48. Signs.
49. Signal Apparatus.
50. Smoke Stacks.
51. Storage Warehouse and Miscellaneous Structures.
52. Structures.
53. Switch Boards.
54. Tanks.
55. Telegraph and Telephone Lines.
56. Tile Drain Lines.
57. Tracks.
58. Track Appurtenances.
59. Track Scales.

60. Tramways.
61. Transfer Tables.
62. Traveling Cranes.
63. Trestles.
64. Tunnels.
65. Turn-tables.
66. Viaducts.
67. Water Lines.
68. Water-Purifying Plants.
69. Water Stations.
70. Water Tanks.
71. Water-ways.
72. Water Works.
73. Wells.
74. Wharves.
75. Windmills.

All devices of a fixed character not enumerated in the foregoing list are to be classified as *real estate*.

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